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CURTIS G. HUSSEY.*

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in the first of the control of the c perior copper region, and without his foresight, courage, faith and capital, that great source of national wealth might never have been opened, or, at least, its opening would probably have been delayed for many years. He was interested in opening the first copper mine on Lake Superior, and in the erection of the first works for smelting Lake Su-

DR. C. G. Hussey of Pittsburgh has perior copper, and built the first copper won success in so many fields of labor, mill in this western country. To him, and has done so much as a business also, belongs the honor of being the man, manufacturer and developer of first person to succeed in making the new fields of public wealth, for the ad- best quality of all descriptions of crucivancement of general interests, that it ble cast steel, and in establishing this would be difficult in these limits to give great branch of industry in Pittsburgh anything like a detailed record of his and in this country-and that, too, in life. There are a few points, however, the face of a carping and unbelieving that must be touched on in any history public. Of these twin achievements of industrial Pittsburgh. He is the we shall speak more in detail, and it will acknowledged pioneer of the Lake Su- then be clearly seen how much Pittsburgh owes to him on account of the development of two of its most important manufactures-copper and steel.

> Dr. Hussey is, in the fullest and best meaning of the term, a self-made man. Nature gave him a strong physical constitution and a clear brain, and he has made the best use of all his powers. His natural abilities were the only endowments with which he was equipped in the start, and whatever he has done or gained is due to his own efforts.

^{*}This article has been prepared by one who has been intimate with Dr. Hussey for more than thirty years, and knows whereof he speaks, for of much be has been a part.—[ED,

His ancestry extends back, in traceable lines, to the Ouakers of Old England, a body of men as grand in their principles and as sturdy and inflexible in the defense of their religious convictions-in a peaceful way, withal-as the Puritans themselves, but who, unlike some of our good but mistaken and bigoted Puritan Fathers, never denied to others the rights which they claimed as their own.

Among his ancestors was one Christopher Hussey, who lived in Hampton, Massachusetts, in 1650 et seq., who appears as an associate of Robert Pikea liberal Puritan-in the defense of the Right of Petition. In 'The New Puritan' (Harper Brothers, 1879), we find that Robert Pike was "the Puritan who defended the Quakers, resisted clerical domination and opposed the witchcraft persecution." In 1653, Robert Pike denounced a law passed by the general court (of which he was a member), making it a misdemeanor for anyone to preach to the people on the Sabbath who was not a regularly ordained minister of the church, and that august, incensed and amazed body instantly arraigned the culprit who dared to insult their majesty. It was declared that he had been guilty of defaming the general court, and ordered that he should be disfranchised, disabled from holding any public office, bound to his good behavior, and fined twenty marks, equal to thirteen pounds, six shillings and eight pence. A hundred, more or less, of the citizens of several towns-Salisbury, Newbury, Hampton, Andover and Haverhill-who had signed a petition the Hudson river. Ten other partners

to the court for the repeal of the obnoxious order, were called upon to excuse or defend their audacious conduct in calling in question the supreme authority of the general court. A large number hastened to apologize and proclaim their submission, but fifteen stood out and valiantly refused to succumb. Among these fifteen was Christopher Hussey of Hampton.

The persecutions of the Quakers by the selfrighteous Puritans and their clergy and court were more or less actively continued, and in 1658 a new law was passed against them, declaring that Quakers and such "accursed heretics" must be dealt with according to their deserts, etc. Several offenders were executed, and some who preferred not to be hanged resolved to depart from the jurisdiction. A party of ten, of whom Christopher Hussey was one, was formed, who bought the island of Nantucket for a place of refuge, in the winter of 1658-59, preferring to live there among three thousand "savages"-the only previous dwellers-to breathing the fearfully holy atmosphere of eastern Massachusetts, where those in power could praise God and curse Quakers in one breath, or build a church, hang a heretic and burn a witch with equal zeal. In this enterprise, Robert Pike sympathized and joined. The island was owned by Thomas Mayhew, merchant of Watertown, who had bought it in October, 1641, from the agent of Lord Sterling, James Forett or Forest of New York, who claimed for his principal all the islands lying between Cape Cod and

were admitted before the deed was exe- were raised to a strong and vigorous Robert Pike, with whom Christopher Hussey divided his one-tenth interest. The love of free air, of justice and of equal rights exhibited by these two men -par nobile fratrum-has always distinguished the typical Quaker, and is a marked trait in the character of Christopher Hussey's worthy descendant. The peace-loving Ouakers who removed to Nantucket left behind the entire monopoly of hate and blood to their Puritan brothers, and no serious differences ever arose between them and the red men, who were readily influenced by the spirit of brotherly love shown by their new white friends. The latter soon set the example of pursuing in open boats and capturing the whales which sought the shallow waters of that shoal-bound coast, and the Indians quickly followed, and soon became among the most expert of the original whalers of Nantucket.

It is a matter of much interest to know that Nantucket was bought only two hundred and twenty-six years ago, by a band of Quakers, to serve as an asylum of refuge from the deadly persecutions of Puritans, and that one of the original purchasers was a direct ancestor of one of Pittsburgh's distinguished citizens.

Dr. Hussey's parents lived on a farm near "Little" York (as York was then called), Pennsylvania, in 1802, soon afterwards moving to Little Miami, Ohio, and, in 1813, to a farm in the vicinity of Mount Pleasant, Jefferson county, in the same state. They were blessed with ten children, all of whom

cuted, July 2, 1659. One of these was manhood and womanhood. They were both endowed with many high qualities. The father had a splendid physical development, was tall and erect in stature, and of commanding appearance. The mental and moral character of his inward life was of the finest mould, and fulfilled every outward promise. To the logical mind and bright intellect of the mother were added force and energy, which were regulated by gentleness, amiability and the highest moral principles. The children could desire no better inheritance than the sweet and noble qualities of soul, mind and person of their loved and honored parents. In 1831 they moved, with the yet unscattered portion of the family, from the farm to Mount Pleasant, which had become a beautiful village, and there spent the remainder of their lives to "a good old age," in quiet and comfort. We have seen that the father came from the sturdy Quaker stock of Old and New England. Miss Lydia Grubb - the mother - was also of a noteworthy Ouaker family. Her father - John Grubb-was a member of the Society of Friends in England, and came from there before the Revolutionary War. His first settlement in this country was on a farm about three miles from the present city of Wilmington, Delaware. There he raised a family of some eight or nine children, all of whom became respectful and valued members of society. Some of the connections settled in Lancaster county, Pennsylvania, and were among the early owners of the great Coleman iron property in that

country. Among the sons were "Joseph, John and Curtis," names given them in honor of several distinguished iron men residing near their birthplace, and which were handed down to the Hussey children. Joseph Grubb was a leading hardware merchant in Wilmington, and was followed by a son who continued the business for many years. Another son—a namesake—also engaged in the same business in Philadelphia. All retain the religious faith as well as many of the strong qualities of their original English ancestor.

The subject of this sketch was born on the farm near York in August, 1802, and after doing his share of work as a boy on the new farm in Ohio, and making use of such school advantages as the day and neighborhood afforded, he studied medicine with an eminent physician at Mount Pleasant. As soon as he had completed that course he removed to Morgan county, Indiana, where he practiced for several years. Having done what so many medical men do not do in their early days of labor-accumulated some capital-he engaged in the mercantile business, branching out and extending his operations as opportunity allowed. He soon owned several stores in as many places in that neighborhood, the superintendency of which was maintained while he traversed the country in the practice of his profession. He also soon began to deal extensively in pork and other lines of provisions, having heavy transactions with New Orleans.

The details of these first few years are full of interest, and we cannot refrain from giving some of them,

In 1825 the young doctor started out for himself with no capital but brains. energy and a good character. He first settled, as stated, in Morgan county Indiana, where favorable letters of introduction gained the kindly offices of a few influential citizens, and got into early and large practice, which he maintained for ten years. In the short period of three or four years, he had accumulated several thousand dollars, which constituted quite a fortune at that time, and is a large sum still, for a young man to acquire in the outset, within so short a time. With his accumulations, he started a general country store in Mooresville, Morgan county, Indiana, but soon afterwards transferred it to Gosport, on White river, a larger town not far distant. Similar stores were, from time to time, established in Monrovia, Columbus, Millvale and Far West, all of which were conducted by partners whose successful management, under his supervision, proved his good judgment in their selection. In those almost colonial days, greenbacks were yet to be invented, and pork was a legal tender for calico, coffee and tea. From this arose a trade in pork, which was taken in for "store goods," and pork-packing and curing soon followed, and grew into large transactions. A large packing house was erected at Gosport, White river, at which place an extensive business was carried

We may sagely remark that water runs down hill, and so the waters of the White river, the Ohio and Mississippi floated flatloads of pork of all cuts, down to New Orleans for consumption on the great sugar and cotton plantations where, next to corn, it was the staple article of food.

In the fall of 1836 he made a large contract for provisions, deliverable in Bayou Sara, about one hundred and fifty miles above New Orleans, which proved to be one of his most profitable ventures. Even then he began to discern the signs of the times, and to prepare for the disasters which overwhelmed the country in 1837. He went to New Orleans to make his own collections. and was there in May, 1837, when the banks of that city first suspended specie payment. But, prompted by his own remarkable prescience, he had protected himself in due season, and was not caught in the storm which wrecked others almost without exception. While at New Orleans he took the malarial fever, and suffered greatly during the tedious return of two weeks by steamboat to Louisville, and did not thoroughly recover for nearly a year.

In the general management of his stores he exercised great economy as to expenditures that did not directly contribute to profit. He allowed no offices and no bedrooms, and many times himself slept only on a pallet laid on the counter, during his rounds of inspection. Money was spent only on essentials-on goods that could be profitably turned. The application of such principles has been varied to suit circumstances all through his life, and has proved profitable. He could have been supplied with considerable capital by accepting deposits freely offered him by farmers and others, but, strange to say,

he refused to accept any, seeing with his usual sagacity the dangers involved -that such supplies would make money easy in the store, thus leading his partners to slackness in making collections; and that, when hard times approached, the calls from such depositors would be prompt and urgent, and perhaps difficult to meet. By this policy alone he saved himself from many of the troubles which fell upon his less cautious neighbors. During all the years of his dealing in pork, while in many his profits were large, they were never less than six per cent., except in one year, when, by reason of a misunderstanding on the part of one of his partners, he suffered a moderate loss. Such a record in the hazards of pork-dealing is rare.

In 1829 he was elected to the Indiana legislature, but declined reëlection, as the service interfered with his business and added too much to his burdens. We may imagine the wear and tear of brain and constitution involved in the prosecution, with such close personal attention, of so many scattered enterprises. He worked with that industry which has been a characteristic of his whole career, and, as a consequence, his health became somewhat impaired, and he felt the need of a change.

In 1839 he married, and soon after removed to Pittsburgh, continuing for many years the purchasing and packing of pork in the west, and bringing it to market in Pittsburgh and the principal Atlantic cities.

Soon after coming east, he heard rumors of the existence of copper in the now well-known copper regions of Lake

Superior, then a part of an unbroken wilderness held by the Indians, and giving only a hint of their hidden riches in iron and copper. It is true that for many years isolated specimens had been found here and there, but no effort to explore and develop the mineral deposits was made until Dr. Hussey brought his faith to bear upon the problem, and soon caused his faith to be followed by his works. In 1843 he determined on a thorough investigation, and sent John Hays of Pittsburgh, a man possessing the courage and energy required for the purpose, into the faraway and lonely region, to prospect and see what discoveries he could make. His report was such that Dr. Hussey determined on a venturesome operation and quietly made his preparations for it. During his exploring tour, Mr. Hays had purchased for Dr. Hussey a onesixth interest in the first three permits for mining in that region ever granted by the United States. They had been taken out originally by Messrs. Talmage and Raymond of New York, and Mr. Ansley of Dubuque, Iowa, each onethird. Of this one-sixth interest, Mr. Hays was presented with one-fourth and the other three-fourths were sold to Mr. Howe. Later in 1843 other purchases were made, until Dr. Hussey and his friends obtained a controlling interest, the shares being held as follows, viz :--

C. G. Hussey		. 24
T. M. Howe		. 24
Charles Avery		24
John HaysWilliam Petit		. 24
William Petit		24
Talmage & Raymond		- 24
Total	10	24

The permits were three miles square, and the first was located at Copper Harbor, the second at Eagle River, and the third some three miles west of the the second, but, being off the copper belt, was never worked.

In the winter of 1843-44, the "Pittsburgh and Boston Mining company" was organized, and the spring of 1844 sent Mr. Hays into their newly acquired territory, accompanied by a competent geologist and a small party of miners, who prosecuted mining at Copper Harbor until autumn.

Dr. Hussey made his own first visit to that region in July to September of the same year. We cannot understand so fully as we ought the difficulties meeting the pioneer copper miner without some of the interesting details of his experiences. When he made this first visit, he took steamer from Cleveland via Detroit to Mackinaw-then a little hamlet containing scarcely more than a few troops and a fort. Mackinaw and Sault Ste. Marie there was no steam, and the trip could be made only in a birch-bark canoe, or in a kind of scow propelled by oars and sails, and known as a "Mackinaw boat." Having procured a "Mack" and crew, he followed the coast of islands and mainland the first day some forty miles to Point de Tour, the turning-point of the west channel from St. Mary's Strait into Lake Huron, and there he camped out the first night. Next morning he started for Sault Ste. Marie, which place was reached in safety after a risky and tiresome trip of fifteen hours. Here he waited three weary weeks be-

fore he could get conveyance farther on the 200-ton schooner Algonquin, which was the only craft then plying on Lake Superior larger than a canoe. schooner John Jacob Astor, of about the same size, had been running in Astor's fur trade along the northern and western shore, but was wrecked a short time before, leaving the Algonquin the only vessel on the lake. He was landed at Copper Harbor, on Keeweenaw point. The whole country was a primitive wilderness, inhabited only by Indians, except a few mining explorers and workers, and a squad of soldiers sent out for their protection by the secretary of war, and occupying Fort Wilkins, located at Copper Harbor. This fort had been established at the suggestion of Mr. Avery, who had visited Washington and conferred about it with his old Pittsburgh friend, Judge Wilkins, then secretary of war.

The party with Mr. Hays were the first miners that had ever worked in that region, except at a remote previous age. Ancient miners had done some work, but with primitive tools and small results, and had left millions of stone hammers distributed at various points. Mr. Hays had prosecuted his summer's work a few rods east of Fort Wilkins, on what had been thought to be a vein, but as it developed a secondary formation, Dr. Hussey, upon consultation with the geologist, promptly stopped all further operations there.

Dr. Hussey spent a fortnight in his inspection of the mineral character of the country, and was then ready to turn his face homeward, having found much

of interest in that region of primitive nature and primitive man, bright and beautiful skies, clear, invigorating atmosphere, crystal waters fathomable by the eye to marvelous depths, and many other attractions all its own. Again, as on its upward course, the Algonquin delayed its appearance, and for two weeks more he kept up his look-out for its downward return; then, once on board, after a four days sail, he stepped ashore at Sault Ste. Marie. There a large birch-bark canoe was procured, and loaded with four passengers, two Indians for a crew, and three or four trunks, which tested its full capacity. Oars and sails propelled the frail craft, their course keeping them some five to ten miles from shore. As the waters were calm it was deemed best, after the doctor's persuasion, to push on till 3 o'clock next morning, when they reached Point de Tour, where he had first encamped on his way up, and there they slept in an Indian hut. At the end of the second day they landed safely, and with thankful hearts, at Mackinaw, where they could once more secure comfortable conveyance. Dr. Hussey gave his close personal attention to the affairs of the Pittsburgh & Boston Mining company, and made many trips to their mine in subsequent years, but none so memorable as this first one.

Mr Hays remained there through the winter, and made some explorations on a supposed vein of black-oxide of copper, but nothing of value was developed. The next year—1845—further explorations were instituted, and mining operations transferred from Copper Harbor

to Eagle River, where a wonderfully rich vein of mass copper was discovered and which soon became known as the "Cliff Mine." Mr. Hays rendered important service to the company in its early days, but did not retain his interest long enough to reap the full benefit of its ultimate success.

The Pittsburgh & Boston Mining company thus opened the first mine in the copper region, and was the first to demonstrate that the metal could be procured in paying quantities. This mine—the famous "Cliff"—cost its owners, in assessments, \$110,000.00 and paid them in dividends \$2,280,000.00 before it gave out, thus yielding more than twenty-fold profit.

The success following this venture set the country into wild excitement, and the rush for the copper regions was almost equal to that toward the California gold fields a few years later. A description of the scenes witnessed, and of the speculation that ran rampant, was published some years ago, and from that we borrow the following illustrative points:

The policy of the general government, at this time, was not to sell mineral lands, nor allow preemptions. These lands were not controlled by the general land office, but by the war department. An agent of that department was stationed on Porter's Island with his corps of engineers and draughtsmen. Permits, as they were called, were issued at Washington. These permits at first covered nine square miles, but were finally reduced to one square mile. The department required returns to be made to the Mineral Agency, giving an account of the work performed and mineral raised, and a payment to the mineral collector at the rate of twenty per cent. mineral value. These permits were issued in vast numbers; still there was much wire-pulling used to secure these invaluable documents, the mere

possession of which was enough to make a man happy and affluent. It was the business of geologists, surveyors and explorers to hunt up eligible land upon which to plaster the permits. The country was prospected thoroughly for that purpose, but at last an actual examination of land suitable for "locations" was abandoned as too slow, and the work of locating was done in the offices on the maps. One of the consequences was, that when owners came to examine their properties, guaranteed to be rich in copper and silver, the lands were found to be out under the lake, or down among the Lower Silurians. . . . Many of these locations were worthless, and perhaps a majority were never occupied as mines; at least, not till many years afterward, and then by other parties; the lands fell back into the hands of the general government for disposal at some later day.

From the same publication we quote the following in relation to "Cliff Mine":

The "Old Cliff" is truly a historical mine. During the dark days that followed the excitement of r846, and during other dark days which from time to time fell upon the copper region, the "Cliff" was a sure and steadfast reminder that copper mining could be made profitable in the upper peninsula. It was always a strong, moral force, encouraging new hopes and enterprises. In the dark days it stood as a beacon light to the despondent operators throughout the district; its failure would have been followed by general collapse, and the mineral wealth of Lake Superior would have been everwhere regarded as a punctured bubble."

The "Cliff" was a great mine, and once found, here was a great opportunity—the first of its kind; how many are there who have the wisdom to make the most of their opportunities. Only a favored and gifted few. It might perhaps be claimed that almost any man of average good business capacity, or any company made up of such men, having once found a cliff deposit, would have conducted it through a similar splendid and satisfactory career; but that by no means follows. Many an

admirable mining property has been wrecked, or had its profits greatly lessened by misdirected effort and wild expenditure. When Cliff mine was started, the business of mining in this country was entirely new, and it would have been but natural if great and costly mistakes had been made in efforts and methods. Mining so strongly stimulates the fancy, and so powerfully appeals to the imagination, that many engaging in it lose a large share of the common sense and prudence they are accustomed to exercise in their regular and daily employments, especially when their ventures give early and flattering promise. Just then a strong and courageous conservatism is needed, in order to prevent great and perhaps fatal waste. Cliff mine was threatened with all the early dangers of such enterprises. Great masses of pure metallic copper-the finest ever seen-so excited most of the lucky owners that they were unwilling to wait for a healthy and practicable development, and, forgetting the difficulties of operating in a distant wilderness, and overlooking the inevitable slowness of so opening the mine that its riches could be reached, they counseled large expenditures which would have availed nothing, because the proposed facilities could not have been applied. Then it was that there was occasion for the conservatism so necessary to successful pioneering, where we lack the guideboards of past experience. The same comprehensiveness of view, energy and faith that led to the inception of the enterprise, and had conducted it to its first success, were now required for its safe continuance

and were not found wanting. The same master-spirit who had controlled affairs hitherto, now originated and insisted upon the obviously wise policy of first ascertaining and settling as far as possible, the genuine and reliable character of the property underground, and when that was proved valuable, it would then be wise to make proper surface improvements, just as great and no greater, and just as fast and no faster, than they could be made use of. By this policy of always looking before leaping, and owing also to the fact that the affairs of the company were always conducted to the best advantage, and on strictly business principles, a great deal of squandering was prevented, and a more than corresponding addition was made to the profits. The company was fortunate in its first great discovery; it was also fortunate in the adoption of a grand but simple policy which insured the best results.

The first president of the company, upon its organization in 1844, was the Rev. Charles Avery-so well known for his great benevolence to the colored race-who retained the office until his death, January 17, 1858. Dr. Hussey was then elected to the position, and held it until the final winding up. The Hon. Thomas M. Howe was the secretary and treasurer until his death, July 20, 1877. Active mining operations ceased in 1870, the property was all disposed of within the next few years, and the affairs of the company were entirely closed up by a final distribution of assets in 1870.

A large proportion of the copper in

the Cliff mine was found in huge masses, which would weigh before division from one to thirty tons or more, and some of which required weeks and sometimes a month of labor in cutting up, before they could be removed from their places and hoisted to the surface. One large mass was blasted down, the weight of which was estimated at two hundred tons. Occasionally masses weighing four to six tons each were brought down for smelting. The transfers at Sault Ste. Marie were slow, laborious and expensive, until the opening of the great "Soo" canal in May, 1855.

When such immense masses were first sent down for treatment, the problem of the manipulation of copper in such unwieldy bodies had not yet been solved. Skilled smelters from Swansea, and in Boston and Baltimore, who had hitherto been accustomed to handling ores only with a shovel or in small lumps, were, perhaps, more at a loss than those who had no previous ideas to cut loose from. Early in the year 1847, after the opening of the Cliff mine, and before any other of the Lake Superior mass mines were worked on a large scale, the company endeavored to have the masses smelted at the Revere copper works in Boston. At these works they found them so difficult to handle and treat that they charged eighty dollars a ton for smelting. During the same year, 1847, an experiment was made at the Fort Pitt foundry in Pittsburgh, in an ordinary cannon furnace, by taking down the side of the furnace and building it up after the charge was in. The copper was then cast in pigs in a sand bed. So

much copper was lost in slag and black copper needing refining, that it was manifest, after one attempt, that this style of furnace could not be used, and no further attempts were made in that direction. In 1848, several hundred tons having been sold to the copper works in Baltimore, they built a reverberatory furnace, with one side almost entirely open and a small door on the The large masses of copper were introduced at the open side and pulled into the furnace by attaching chains to them which passed through the small door on the opposite side, and were there attached to a capstan. The charge once in the furnace, the side was built up, and the operation of melting conducted as for iron. This, however, was ruinous to the bottom, and the expense for labor in charging and making repairs was too great for continuance. As the result of these experiments, the smelting of masses of copper, unless cut into very small pieces (an expense which the price of copper did not justify), was considered one of the questions almost too difficult for solution. The attempts made had met with so little success that great discouragement was felt, and it was finally gravely proposed to smelt the masses with sulphur or sulphurous ore to reduce the metallic copper to a matte! This, however, was never done.

Dr. Hussey, upon whom the burden of the solution of the problem had been laid, was, nevertheless, convinced that there was a right way, and that it would be found. It occurred to him that a furnace could be built with a movable top, and this proved to be a

solution so simple that former troubles seemed almost laughable. Notwithstanding the incredulity of those around him, he at once erected a reverberatory furnace, similar to those used in Swansea for refining the sulphurous ores of Chili, but with a movable cover. The cover was lifted to one side, the masses were hoisted by a crane and let down into their bed upon the bottom, the cover was replaced, and the thing was done. The first ingots cast were, in every respect, as good as those now made. The excellence of this original and first successful furnace was proven by the working practice of many years, and the same model was followed in the subsequent erection of copper smelting furnaces in Cleveland by Joseph G. Hussey & Company, and at Detroit by the Detroit Copper company. It was thus made possible to smelt at a profit; without such solution of the difficulty the value of the mine would have been so small as to scarcely pay for working.

The only market for the copper mined and smelted was through a commission house in New York. This threatened to make an over-supply and put the Pittsburgh & Boston Mining company comparatively at the mercy of the east, which accorded but poorly with Dr. Hussey's sense of the proprieties of profit. As there was no manufacturing of copper done west of the Alleghany mountains, the mills of Connecticut had the entire west to themselves in the trade in sheet copper, sheet brass, etc.; thus it seemed to him that a concern at Pittsburgh might realize a profit by saving two freights and by getting nearer

to the consumers, and at the same time benefit the Pittsburgh & Boston Mining company by consuming a large portion of their product, and thus withdrawing it from a threatened surplusage in the east.

Sometime in 1848 he began to agitate these views, but met with no encouragement for a long time. All who were approached held back. He strongly urged Mr. Howe to join him, but for some time he also declined the great opportunity, thus adding to the infinite number of examples showing how slowly new ideas win recognition and adoption. Nevertheless, the scheme was too clearly developed, and too firmly lodged in the mind of its projector, to be in any danger of abandonment, and Mr. Avery, after much discussion, was finally persuaded to match the doctor's \$30,000, and thus, with a capital of \$60,000, the firm of C. G. Hussey & Co. was formed. Mr. Avery's connection was a peculiar one, he was in reality no partner; he merely advanced \$30,000 for the benefit of Mr. Howe, the real and virtually the only partner, who guaranteed to Mr. Avery ten per cent. interest on the amount. This was a most fortunate arrangement for Mr. Howe, for the concern was very prosperous, and his onehalf interest was soon paid for and free. without his having been called upon for any personal contribution whatever.

The mill was built in 1849-50, and on July 1, 1850, manufacturing was commenced, and a warehouse opened for the sale of its products. It will be interesting, in this connection, to give the following extract from a contribution by

Mr. Howe to 'A History of American Manufacturers,' by J. Leander Bishop, Vol. III., 1867.

As the Pittsburgh Copper and Brass Works was the first establishment projected for working exclusively American copper, and as the senior partner was one of the first successful explorers and adventurers in the copper regions of Lake Superior, his history is that of a pioneer in the development of what has become an important element of national wealth.

The attention of Dr. C. G. Hussey was attracted to the Lake Superior region in the summer of 1843, immediately following the consummation of the Chippewa treaty, which extinguished the possessory claims of the numerous tribes of Indians known by that name, and he dispatched thereto, during the same season, a small party to make the necessary examinations preliminary to the organization of a regular mining force, if their report should prove favorable. In the summer of 1844 he visited the region himself, and under his direction was commenced the first mining shaft, which was sunk in the vicinity of what is now known as "Copper Harbor," on a tract selected in pursuance of the first permit to locate lands issued by the United States government. In the following summer regular mining operations were commenced by the company, originated by Dr. Hussey, and known as the "Pittsburgh and Boston Mining company," of which he is now (1867) the president, on the second tract selected in that region, and upon which is located the celebrated "Cliff Mine." This mine was the first to give character to the section as a reliable and remunerative copper producing district, and up to this time it has produced more than seven millions of dollars' worth of copper, and paid to its stockholders a sum exceeding two millions of dollars.

The Pittsburgh Copper Works, it will thus be perceived, are the legitimate outgrowth of the extensive and profitable mining enterprises with which its proprietors have been long and intimately associated.

The "Pittsburgh Copper and Brass Rolling Mills," as they are called, and the smelting works are located on the Monongahela river a mile above town, and of these Dr. Hussey is now, and has been for several years, the sole owner. The mills are still running in as full blast as ever, and are among the most active industries of Pittsburgh. They used most of the product of the Cliff mine until that property gave out. and since then have bought their stock from the mines still in operation. The products are put into market by the extensive house of C. G. Hussey & Company, which has continued the business without intermission under the old firm name. In 1858-50 the present splendid warehouse at 40 Fifth avenue was erected, and in the spring of 1850 they removed to it, and have continued to occupy it ever since.

As already stated, Dr. Hussey was the first man to successfully make crucible cast steel in large quantities, and of the best quality.

It seemed to him a reproach that in this great and growing country, with its natural resources, all the steel used should be of foreign make. He knew the experiment had been tried by others and had failed. He also had evidence in abundance that the public had no faith in the attempt, and that if he undertook it, it would be in the face of open and active hostility. His steel project was received, even by his immediate friends, with much the same doubt and coldness, amounting to positive opposition, that met his plans for a copper mill ten years before. After many objections, and finding that he was fully determined to try the experiment of manufacturing cast steel, Mr. Howe finally consented that the firm of C. G. Hussey & Company might engage in it. He could not, however, refrain from

accompanying his consent with the warning that one or more concerns in Pittsburgh, and many others in the United States had utterly failed in the attempt. Mr. Howe, although thus a partner in both the copper and steel enterprises, yet never gave any personal attention whatever to either business, so that the entire burden of both fell upon the shoulders of their projector.

Of all the failures alluded to, the doctor was well aware, but with a firm faith in himself, and a supreme conviction of right, that was in itself a sure prophecy of success, he persevered without a halt. All opposition, warnings and prognostications of evil only served to stimulate him, and as difficulties arose his inflexible purpose only mounted the higher. With such conviction, faith and purpose, but one result was possible-success. He decided to allow the experiment a fair trial up to the expenditure of a hundred thousand dollars, and began in 1859 with the purchase of the old steel plant of Blair & The difficulties he had Company. looked for did not fail him. England had, in her own interest, educated this country in the belief that the article could not be produced here. Men laughed at the pioneer endeavor. At first the blacksmiths would not use the new material; the public had no faith in it. But he kept on; he threw his Anglo-Saxon grit into the balance, and determined not to give up until every resource of courage and skill had been exhausted. He would never have underglish methods; he adopted new meth- built up a good business, and, as he

ods, perfecting what he calls "the direct process," which consists in cutting up the iron into small pieces and putting it into the crucible, and then adding the proper amount of charcoal to carbonize the iron, it being then melted in the usual way.

The old process, which has always been used in England, is to put the bars of iron with charcoal into what is called a cementing furnace, in which the iron is roasted at a high heat for one to two weeks, so as to enable it to absorb the carbon, the product being what is called blister steel. The carbonization being quite irregular, in order to secure uniformity of quality, this crude steel is broken into small pieces, and after being assorted into various numbers, according to degree of carbonization, is melted in a crucible. This is a long and expensive method compared with the "direct process," but the latter was attacked bitterly by the agents of English steel in New York and elsewhere, who declared that good steel could not be made in any such way. Nevertheless, after the Hussey steel works had been running for two or three years, it was discovered that good steel could be made and was being made in this country, and other works were started, they adopting, however, the old English cementation process. They all raised the hue and cry that Dr. Hussey could not make good steel by his direct process, which, of course, had its influence in prejudicing the people against the Hussey make of steel; but, in the face taken to make cast steel by the old En- of all his opposition, he meanwhile

knew he was right, he could afford to bide his time; and he thinks that now there is not a single steel concern in the United States which has not adopted the "direct process," and believes it is also being adopted in England.

It must be borne in mind that we are speaking of crucible cast steel—that is, steel made entirely in the crucible—for since that time other direct methods of making steels that are homogeneous, or uniform throughout the mass, have been invented, such as Bessemer and Open Hearth, which make common steels on an immense scale.

Speaking of Bessemer steel reminds us that, in 1862, being somewhat broken down in health after his three years fight in working up the crucible steel business, he made a trip to Europe. While in England he met Mr. Morgan of the house of Peabody & Company, who solicited him to take an interest in the Bessemer patent for America. He was requested to go to Sheffield to see a "blow," and did so. Mr. Bessemer's partner having asked an expression of opinion upon what he had seen, the doctor replied that he thought the process doubtless had a great future before it. Upon his return home, although the inclination to engage in the new enterprise was strong, he decided that the development of still another great process-then far from being perfected-would involve too great an addition of risk and labor to be prudent, and the Bessemer proposition was finally declined.

The first year after the steel business was started, a pressure of other affairs prevented him giving it much personal attention, and considerable money was lost. After this he took the entire management of making steel into his own hands, and the money lost was soon regained; and from many new processes, and changes in methods and general management which he adopted, the profits increased from year to year, and he has ever since continued his personal supervision of the business.

Besides his original developments, Dr. Hussey has made other valuable improvements in the manufacture of steel, the details of which we omit.

The outcome of a small beginning and that to which it has led, is best shown by a visit to the great steel establishment of Hussey, Howe & Company, which covers over five acres of Pittsburgh's most valuable land, which is filled with massive and costly machinery, which employs a large number of men, which sends its products throughout all the country, and which has a name for good work and honorable dealing that is excelled by none.

Dr. Hussey has always been most generous in promoting the prosperity of all connected with him, and has been ever ready in giving due credit to the deserving, attributing a large share of his successes to those whom he has gathered around him. The right man in the right place was of particular value to him in the early days of steel; and among the good and true who began with him in 1859 was Mr. James Adair. Mr. Adair organized the accounts and constructed numerous tables that were indispensable to secure proper understanding of current work, and of

the complicated causes leading up to ascertained results. His special talents in his department were eminently serviceable in the outset when all were feeling their way, and when the lack of proper accounts and tables might have resulted in serious loss; and much has depended upon his capacity and industry, not only at the start, but up to the present time.

We cannot close our consideration of the steel business without mentioning the name of one of the staff most intimately connected with the founder-his son, C. Curtis Hussey. "Curtis," as he was familiarly called, was too young to enter the arena in the beginning, but he did so after one or two years. As events proved, he had inherited great business ability, being a worthy son of a worthy sire, and gradually rose to the chief management of the entire business. This he retained with distinguished success for many years, but its responsibilities and requirements ultimately proved too great a tax upon the life powers of one who did not spare himself, and on the first day of March, 1884, he gave up the great struggle and peacefully passed away. Thus, in a manhood still young, and with the promise of a long and useful career before him, he was removed from a stricken father and mother, an only and loving sister, and a bereaved wife and family. The following communication from Mr. Adair to Dr. Hussey was read at the funeral, and is a touching tribute that will show better than anything we can say, the regard in which Curtis was held by those who knew him best:

PITTSBURGH, March 2, 1884.

DEAR SIR:—There are times when grief is so sacred, and the stricken household such holy ground, that even the voice of sympathy should be hushed, its footfalls unheard, and its tears unseen, and when all it would say or do should be entrusted to the silent messenger who asks no audience, wearies no time, nor taxes the heavy laden for an answering word. Through him I send all my sympathy. Words of comfort, philosophy and religion are vain, for the hours of suffering have come. Nevertheless, God and his great high priest, Time, ever live and reign, and as the days softly step upon the troubled mind, they say, "peace, be still," and lo, in a little while a great calm shall come.

I shall miss Curtis a great deal, for we have worked together for over a score of years, beginning with our young manhood. If "labor is worship," in all religion he set us an example. Industry and duty praise him, while gentleness, kindness and charity, which is forgiveness, claim him as their boy. And if I miss him, how can I estimate your loss without the infinite factor of a father's love for an only son, with which to make the multiplication? God knows the answer, but he will soon begin to rub away the long line of figures with his own kind hand.

Yours with great respect and regard,

To Dr. C. G. Hussey.

JAMES ADAIR.

Dr. Hussey is also at the head of other manufacturing enterprises, but upon these we will not enlarge.

There is much more that might be told to show his enterprise in assisting to develop the resources of the country; we will content ourselves, however, with a brief mention of only a few additional items. Besides taking the share he did in connection with the Cliff mine, he was a leading spirit in the development of the Aztec, Adventure, North American, Medora, Mass, Northwestern, National and other copper mines, of which the National paid good dividends and continued to do so for several years. He was among the earliest to secure

extensive tracts of iron lands, as well as copper, in the Michigan peninsula, on some of which mines had been opened and worked. In California, also, he was among the first, having begun explorations in 1849. Gold, silver and copper in Georgia, Colorado, Utah, New Mexico, Arizona, Nevada, British Columbia, Mexico and elsewhere, have received his active attention, and have been sought for with free expenditures.

Having been so long and so well known as the pioneer of Pittsburgh, in copper mining, his office was the first place for several years to which mining schemes from every point were brought. Much of his time was often occupied in their consideration. He was flooded with big tales, every prospect was pleasing and nothing vile, the show was admirable, a fortune of untold millions was already blocked out and in sight, there could be no mistake about the value of the mine, and success was "dead sure" in every case; but he never took hold without having a personal examination made of the property by a gentleman who was without a superior as a mining expert, and who made at least a hundred such examinations for him and his friends. enough was done and spent to ascertain the probable true character of the property, and nearly every piece was rejected, scarcely one of such rejected schemes being ever heard of again; a few were engaged in with varying success. These dangerous traps were set for many years, and it was a continual fight to keep out of unworthy schemes. The attention given to them cost a considerable sum in the aggregate, and a vast amount of brain work, but the doctor and his associates in them were pleased to come out so well as they did, and they had the satisfaction of gratifying their pioneering tastes, and, at the same time, of doing their full share in promoting the general development of their country.

In all of the great enterprises in copper and steel with which his name is associated, Dr. Hussey has been, as stated, the originator and prime mover, and has permanently controlled and sustained them from the beginning, and throughout their continuance. His has been the master mind without whose fiat no important move was made-those with whom he has been connected, and those with whom he is still connected having had the good sense to appreciate his wisdom, and deeming themselves fortunate in their enjoyment of its bene-The history of the majority of similar successful undertakings always has been, and always will be the history of one man, or of a limited number of men possessing mental abilities and endowments far above the general inheritance of their fellow-creatures.

Dr. Hussey's business policy since coming to Pittsburgh, has been somewhat unusual in one respect, which is—that in his mining and manufacturing enterprises, and investments in property, he has never borrowed any money, and it has always been his custom to keep large cash reserves in his different concerns. If all business men would follow the same policy, we should have no money inflations, depressions, panics or

widespread insolvency, and business friction would be greatly reduced.

In 1860, or early in 1861, Mr. Lewis Bradley began to agitate the founding of an observatory in Allegheny. Some three or four gentlemen met, of whom Dr. Hussey was one, and their first thought was to start by placing a modest telescope in some house in that city. But their thought expanded, and they decided to buy a good tract of land, erect a suitable building, and put in a large instrument. The present site on Observatory hill was selected, and a tract of twenty acres was secured at a cost of \$20,000, now probably worth \$100,000. Dr. Hussey was elected president of the Observatory company, and Mr. William Thaw was made treasurer. On the twenty-third of November, 1861, he paid in his first subscription of one thousand dollars, to which other thousands were added from time to time by himself. Mr. Thaw and others. The observatory was erected and equipped with a fine telescope and a good assortment of appurtenant instruments, and was for two or three years under the management of Mr. Bradley. He was succeeded by Professor Philotus Dean, who had the management for some three or four years, and was followed by the present incumbent, Professor S. P. Langley. Dr. Hussey remained president until the whole property was consolidated with the Western university, in 1867 or 1868. Upon the transfer, at the instance of Dr. George Woods, then chancellor of the university, Professor Langley was appointed "director," as the astronomical superintendent of the

observatory is styled, and a most happy appointment it was. The professor was free from family cares, and being wedded only to science—the focus of his affections-and possessing great natural scientific aptitudes, the results have been adequate to the furnishments. By the great liberality and intelligent cooperation of Mr. Thaw, Professor Langley's expedition to Mount Whitney, in southern California, in 1881, was inaugurated. Professor Langley was supplied with every facility for his purposes, and the magnificence of the results of the expedition attests the scientific abilities of the professor and constitutes an ample reward to the gentleman whose liberality had alone made the expedition possible. Under such auspices of talent and money, the Allegheny observatory has become one of the most renowned institutions of the kind in the world, and is a matter of pride to every citizen of this vicinity. , Dr. Hussey has been a trustee of the Western university for many years, which position he still holds. He thus also remains connected with the observatory, although he no longer gives personal attention to the active management of its affairs.

Another noted Pittsburgh institution claims him among its founders—the School of Design for Women. The position and needs of woman have engaged his profound sympathies, and he has ever been on the alert to give such sympathies practical expression. In 1864, Mr. Thomas W. Braidwood, principal of the School of Design at Philadelphia, came to Pittsburgh for the purpose of establishing a similar in-

stitution in this city. He at once sought out Dr. Hussey, and soon enlisted his sympathies and active cooperation. Their plans were made and presented to others, and they were afterwards joined by William Thaw, Charles J. Clarke, and a number of other liberalminded gentlemen. In January, 1865, the organization was effected and work begun. Dr. Hussey was the first president, and Miss Mary J. Greig, who had been Mr. Braidwood's first assisstant in Philadelphia, was the first principal, and remained such until her marriage to Mr. Nicholas Veeder in 1866. After Miss Greig's resignation, Dr. Hussey went to Philadelphia to secure her successor, and made arragements for the coming of Miss Esther K. Hayhurst, a lady of rare qualifications, who occupied the position until her death, about four years later. Dr. Hussey desired a woman as successor to Miss Hayhurst, but finding that many of the contributors preferred to have a man as principal, he resigned and Mr. Hugh Newell became the principal, retaining the position until June, 1878. Miss Annie W. Henderson, an early pupil, was then elected to the principalship and still holds it, having shown her competency by her successful management and artistic work.

Dr. Hussey resigned the presidency for the reason that the election of a man to the chief management of an institution, founded expressly for the benefit of women, was contrary to his sense of right, and he could not consent to cooperate with an official whom he deemed so much out of place. Although his

active official connection thus came to a close, yet he has always remained a liberal contributor. Mr. Henry Phipps, ir., as his successor, was president for several years, and upon his resignation, Mr. Charles J. Clarke was elected and still occupies the office. The school has always been a useful institution, and under the special patronage of Messrs. Clarke and Thaw has continued to flourish. Through their influence the present admirable rooms were secured in the building of the Young Men's Christian association, and whence radiate far and wide the beautifying and elevating influences of genuine art. Its patrons have the satisfaction of knowing that their efforts are yielding an abundance of good and lasting results. Practical application of the arts taught in this school is made in numerous ways. Some of our manufacturers of furniture, pottery, glass, etc., repeat its designs in their beautiful and varied wares, and our homes are adorned in numberless ways with tasteful articles which have been endowed with value and beauty by the pupils of the School of Design.

Dr. Hussey, as previously stated, is of Quaker descent, and, in religion, politics and social matters, his views agree in the main with those of the Society of Friends.

He is a strong opponent of war, and in accordance with the teachings of that body of Christians, believes that wars are entirely unnecessary and that the principles of true Christianity, if applied in practice, would cause them to be avoided. He is also a strong anti-slavery man—a friend of the negro, and before the war of the Rebellion was outspoken in his views in regard to slavery.

He is desirous of increasing the power and influence of woman, and has given very liberally of his means, and has not spared his personal efforts in her behalf. His regard for woman, and his broad, catholic ideas as to her proper political and social position, are a legitimate inheritance from his Quaker ancestry. The Friends believe that woman's capacities constitute a God-given certificate of her proper duties and place. Whatever she is qualified by natural endowments and by education to do, that she should be allowed and encouraged to do without hinderance of any To deny her this in an impeachment of the wisdom of her Heavenly Father, from whom she has received her divine gifts. It is always safe to be just, and man will only know what he has lost in the past when he sees in the future the benefits that will accrue to himself from the practice of full justice to woman.

In regard to temperance, he was a strong advocate of total abstinence, and has done much to promote that cause, and his good health and the perfect preservation of his mental faculties at an advanced age attest the practical benefits arising from temperance in all things.

Dr. Hussey has a remarkable faculty for divining the course of events, that seems at times almost to amount to agift of prophecy. He forecasts the improbable and anticipates the unexpected with an accuracy that is sometimes startling; but his conclusions are all arrived at

only through the closest reasoning and most thorough analysis. If his lot had been cast in Wall street, he would have been one of its kings. Emerson says that we may arrive at a very good estimate of a person's character in a conversation of five minutes. It requires but a limited intercourse with Dr. Hussey to see that he is an exceptional man, and to gain something of a clue to the secrets of his success.

In person, Dr. Hussey is tall and of fine appearance, and would be marked in any assembly as a distinguishedlooking man. In disposition he is quiet and retiring, and although so widely known through his enterprises, he is seen and known but little in a social way. This seclusion is more of a loss to others than to himself, as the few who meet him socially are well aware. Many of his quiet home hours have been given to the shaping of his enterprises, also many to the diligent perusal of the best authors, of whose choicest treasures his retentive memory has secured a rich supply. With such stores of ripe thought within himself, he is never less alone than when alone. His very modesty and diffidence sometimes give an impression of austerity which a more intimate acquaintance would remove, for he is affable, considerate, and easily approached. Though a good talker, and having an abundance of valuable information and sound veiws to impart, he is nevertheless a good listener, and will hear with attention and just appreciation what the humblest individual may have to say. One might think that a man who has achieved such

large success and enjoyed for so long a time the consideration and respect arising from it, would have become somewhat affected by such influences, but, though dignified in his demeanor, there is no trace of hauteur in his personal intercourse with people of any class. His sympathies are on the side of the humble, the poor and the oppressed, and by those with whom he is in daily and familiar intercourse-his acquaintances, business associates and employes—he is regarded with veneration and affection. And well may this be, for now in the evening of life, upon looking back over a long and laborious business career of more than sixty years, he can safely say that while he has

benefited many he has injured none. Although advanced in years, and now at a period where most men who brave the storms and rigors of life feel the need of perfect rest and abstinence from business cares, he still fills a busy place in the world, giving daily attention to his immense interests, watching the progress of events with keen vision. giving aid and encouragement to those about him, and looking over a long life that although full of labor has been crowned with splendid returns. He is held in the highest respect and esteem by the community in which he has produced such ample results, and his name will always hold a high place in the list of the pioneer manufacturers of the west.

THE CITY OF THE STRAITS.

V

A SHAMEFUL CHAPTER OF HISTORY.

THE United States declared war against Great Britain on June 18, 1812. Governor Hull was then in Ohio on his way home from Washington, where he went to lay before the government the critical condition of affairs at Detroit, which would be between two fires—the Indians on the one side and the British on the other—in the event of war, which was looked upon as inevitable. He had represented to the government that to hold Detroit if war was declared would be impracticable, unless a naval force large enough to wrest control of the lake from the British was organized;

and he declined to accept command of an army then fitting out for the defense of Detroit because his views were not accepted by the government, the members of which were inclined to ridicule the idea that Canada would cause any trouble. They evidently thought that Canada was ready to drop, like ripe fruit, into the lap of the United States, and that a few hundred men at Detroit could hold the fort against any force that would be likely to attack it. Hull's views were sound to this extent, that they were very cautious and conservative and founded upon an exact knowledge of the situation-just such views

expected to lay before his superiorsbut by no means representing what might possibly, if not probably, be effected by the means the government was ready to place at his disposal. There was not another officer of note in the army who would not have jumped at the chance to lead one thousand five hundred men, then concentrated at Dayton, to the defense of Detroit, and who would not have answered with his life for a successful outcome. Hull refused the command, but subsequently reconsidered the matter, hastened to Dayton, and on May 25 assumed command of the twelve hundred militia under Colonels Mc-Arthur, Cass and Findley, and three hundred regulars under Colonel Miller, there collected.

Between that date and the day of departure for Detroit, considerable volunteer additions were made to the force, estimated at five hundred, which would give a total strength of about two thousand rank and file. This total is questioned by some writers, either in view of evidence which they have not thought necessary to present, or because they desire to soften the blow to American pride which fell soon thereafter. The lowest estimate is fifteen hundred, and the actual number was probably more. War had not been declared when the march commenced, and Hull did not learn of it until he reached the Raisin river on July 2, when he was overtaken by a messenger from the secretary of before, when at Fort Miami, on the 1, at the Raisin river on July 2, and

as a prudent executive officer would be Maumee, Hull had chartered the schooner Cuyahoga to convey his baggage and sick to Detroit, with an escort of thirty officers and privates. On July 2, when near Fort Malden, the Cuyahoga was overhauled by an armed British vessel and compelled 'to surrender. The British knew all about the declaration of war several days before Hull, a fact which reflected no great credit on the war department.

Whoever carefully reads the various records that have been made of this part of American history must be struck by an apparent anachronism, common to nearly all of them, in the arrangement of dates in Hull's journey from Dayton to Detroit. In the opening number of these sketches Hull's departure was named as of June 12, which agrees substantially with Sheldon, ('Early History of Michigan'), Cooley, ('Michigan-Commonwealth series'), Lanman, ('History of Michigan'), and Farmer, ('History of Detroit and Michigan'). His arrival at Detroit was placed at about July 13, which agrees with the time said to have been occupied in making the trip, by Lossing, Ridpath, and a dozen other writers. It is found, however, that there is a very general agreement by those who have heretofore written on the subject that Hull arrived at Detroit on July 5 or 6. It is also found upon reëxamination of as wide a range of authorities as possible—with a view to reconciling the apparent contradictions -that Sheldon, Ridpath, Cooley, Farmer directly, and others indirectly, locate war conveying the news. A few days Hull at Fort Miami on June 30 or July

at Detroit, as related, July 5 or 6. It is nearly fifty miles from the Maumee rapids-Fort Miami-to the Raisin. Is it conceivable that Hull's army with its artillery, ammunition, and supplies, marched that distance through an unbroken wilderness a considerable part of the way and no pretence to a roadway in the more open country from Toledo to Monroe, between the morning of July 1 and the afternoon of July 2; or that it accomplished the still more difficult feat of covering the remainder of the distance to Detroit-forty miles-bridging three large rivers and laying not less than two miles of corduroy turnpike on the way, in three days? Such an idea is possible only on the theory that a corps was kept a week or more in advance of the main army to open the road, and in view of what Hull learned at Fort Miami of the situation along the line, it is not probable he adopted that plan to facilitate progress, or that it was possible to have carried it out. From the Raisin to the Rouge there was thirty miles or more of the heaviest timber and worst morasses it was ever the fortune of an army to encounter, and there is nothing of record to show that Hull had any power to It took a month to work miracles. penetrate the one hundred and twenty miles of forest between Dayton and Fort Miami, according to reputable historians. Why should we be asked to believe that it only required five days to accomplish the remaining eighty miles through equally difficult country? Lossing and Ridpath, and perhaps others, afford an escape from part of the difficulty presented by starting Hull from Dayton on

the "first day of June," instead of "about the middle of June." This affords plenty of time for the journey as a whole, but as they all agree in locating him somewhere on the Maumee, between the rapids and its mouth, on July 1, and place him in front of the fort at Detroit on July 5, we are not much assisted by the extra two weeks they have granted for the undertaking. It would seem that the historians had used up so much of the time in getting Hull to Fort Miami that they had to rush him through to Detroit regardless of chronological consequences, in order that he might arrive in time to cross the river into Canada on the morning of the twelfth. It might be argued that Hull's personal movements were not coincident with those of his army-that he might have been at Fort Miami a week after his army had left, or that he might have reached Detroit several days in advance of it. This would be plausible were it not for the fact that hordes of vengeful savages hovered in the vicinity of the army from beginning to end of the tedious march, ready and anxious to cut off stragglers, and that Hull had positive information to that effect. The writer does not feel called upon to make any effort to extricate the historians from the morass of perplexity into which they have plunged themselves and their readers, being content to leave the subject to the treatment of some one who may have recourse to original and satisfactory data.

Whatever may be the truth in regard to the dates just given, Hull was certainly at Detroit on July 12, and on the morning of that day crossed over into

dwell at length upon the details of the brief and disastrous campaign which followed, for magazine readers are certainly familiar therewith. A brief restatement of the situation of Detroit is essential, however, to an understanding to the full force and meaning of the ignominious surrender on August 16. Hull had, with the Michigan volunteers, not less than two thousand two hundred men, a fortified position of no mean strength, and a considerable advantage in weight of artillery available for action on his side of the river. He crossed the river, issued a proclamation of peace and amity to the inhabitants, and threw out small detachments to feel the way in the direction of Chatham and Malden. They obtained a large quantity of supplies along the Thames, and found the enemy in some force, principally Indians, at the Canard river, near Malden. No one questions now that Malden could easily have been captured at this time. Colonel St. George, in command, had prepared to evacuate if the Americans had come in sight of the fort, but they did not come. Beyond a little skirmishing with the Indians along the Canard, there was no fighting on the Canada side, and it is hard to see what Hull imagined to be his mission over there. His officers and soldiers, accustomed to frontier hardships and dangers, were eager to carry Malden by assault, and advance to meet the British forces en route from Niagara for its relief. They felt no hesitation in meet-

Canada. It is not the purpose here to event of a battle. But Hull would not listen to any such aggressive propositions. On July 29 he received notice of the surrender of Mackinaw to the British, and appears to have been unnecessarily disturbed thereat. During the first week in August a messenger arrived from Captain Henry Brush, then at the Raisin river, with two hundred volunteers from Chillicothe, one hundred head of cattle, and other supplies forwarded by Governor Meigs of Ohio. desiring an escort to Detroit, as they were threatened by a large body of Indians and feared to enter the heavy timber, anticipating an ambush. Hull directed Captain Van Horn to cross to Detroit with two hundred men and go to Brush's relief. This was the third great blunder of the campaign, the loss of the Cuyahoga being the first and the failure to capture Malden the second. If Brush's two hundred men were in peril, would not Van Horn's two hundred men be in equal peril in going to their relief? Had Hull any reason to suppose that two hundred men under Van Horn could drive off the savages with any greater ease than the two hundred men under Brush? What Brush needed was a force strong enough to whip or intimidate the Indians before effecting a junction with him. The probability was that a less force would not be able to join him. Van Horn was ambushed before he got half way to the Raisin, although he exercised the greatest precaution. He was attacked by an overwhelming force of Indians and British ing the British in open fight, and would soldiers along what is now the road have had the choice of position in the from Gibraltar to Flat Rock, near the

village of Rockwood, and retreated to Ecorse with a loss of nearly fifty killed and wounded.

Meanwhile Hull learned that General Brock was advancing to the relief of Malden, and on August 8 precipitately recrossed the river to Detroit. On the same day, at the urgent request of his colonels, Hull dispatched Colonel Miller with six hundred troops to the relief of Brush, which should have been done in the first place. He was attacked near the present village of Trenton by the same force that had repulsed Van Horn, but gave the British and their savage allies a lesson that might have turned the fortune of the whole campaign had it been followed up. But on the heels of his brilliant fight, Miller was peremptorily ordered to return with his troops, leaving Brush, his volunteers, cattle and necessary supplies to their fate. This was blunder number four, if indeed the evacuation of Canada should not take precedence. On August 13 General Brock marched his army to a point opposite the fort, and made preparatious to bombard the town. On the fourteenth Hull remembered Brush again, and sent Colonels Cass and McArthur to his relief with three hundred and fifty men, by way of the ford at Flat Rock so as to avoid the enemy further down the river. They became mired in the swamps north of Flat Rock, failed in their mission, and got back to Detroit just in time to take part in the capitulation. Brock's artillery bombarded the town without doing much damage on the fifteenth, and Hull was summoned to surrender, which he declined to do. On the morning of the sixteenth the British troops crossed over from Sandwich to Springwells, without an opposing shot being fired, Hull absolutely refusing, as he had done the day before, to permit his troops to make any resistance. Two shots were fired into the fort, killing several soldiers and civilians, when the white flag was raised by Hull's son, and the disgrace was completed. An American army, in an intrenched position, well supplied with arms and ammunition, had surrendered to a British force but little superior to their own in number, without striking a blow !-Hull's crowning act of folly.

Hull has been loudly accused of treachery and cowardice as well as incapacity in this campaign. All the known facts in the case are so easily accounted for on the theory of incompetence and timidity-a timidity that is not exactly personal cowardice—that there is no necessity for accusing him of anything worse. He was old. He had outlived his fighting qualities. His daughter and her child were exposed to the dangers of the situation. The people whom he had governed for years and sincerely loved were in danger of being killed by British lead and steel, and scalped by Tecumseh's warriors. He had bad dreams and became nervous. He had no heart in the business from the beginning, and less, if possible, at the conclusion. This would be all that the records require to be said were it not for the fact that his conduct of the campaign has been defended as wise and soldierly in all respects. We might

him guilty of everything bad in a soldier except treason, but the logic of the facts cannot be ignored, and the soldierly qualities of two thousand Americans cannot be impeached without denial in order that the record of one may be cleared of its imperfections. It is claimed in Hull's defense that he was short of provisions and could not long have held out, but Cass, and McArthur, and Miller and the rank and file knew all about the state of the larder and advised an aggressive policy. A good way to have got provisions would have been to take them from the British by force, although it is not in evidence that they had any to spare. The prime duty of a soldier is to fight when occasion offers. Hull was given command of an army to fight with, not to surrender, except in dire extremity, which had not overtaken him when he yielded up his sword. His first duty was to whip the British if he could. He did not make an effort in that direction. If he could not defeat them, it was his duty to cripple them all he could, in order that their conquest might be easier for those who might succeed him. He did not strike them a blow. It was his imperative duty to prevent them, if possible, from planting their colors on American soil. His whole conduct was an invitation for them to cross. It was his duty to give ear to the voice of the tried and valiant officers of his regi-He treated them as if they were children. His whole campaign was a series of inexcusable blunders. He did nothing right. He was afraid

ignore the court-martial which found of an Indian massacre, 'tis said. The women of Detroit were not. It is in evidence that they reviled him when the redcoats marched inside the stockade. Every consideration of fidelity, honor, valor, demanded that, before he trailed the flag of his country in the dust, the streets of the town should have run with patriotic blood shed in its defense. There never was a time after Hull arrived in Detroit when signal defeat of the enemy was not possible under a brave and energetic leader. For him to attempt to run a campaign with a few hundred men on either side, on the theories of scientific warfare in a settled country, as he attempted to do, was as absurd as to conduct a prize fight in accordance with Von Moltke's tactics. The rules that necessarily apply in the handling of great armies had little force in this case. The situation afforded an opportunity for the exercise of Napoleonic tactics, which must be relied upon in border warfare. The women and children of Detroit made sport of the British cannon balls which flew over their domiciles on the fifteenth, and wept when the British ensign was run up the flagstaff of the fort on the sixteenth. The surrender was a blot on the fair name of American arms, and the attempts to obliterate it with whitewash only make it appear more vivid.

THE FRENCHTOWN INFAMY.

The disgrace of Hull's surrender was destined to be offset, on the part of the enemy, by an outrage that caused patriot blood to boil with justifiable indignation and which has forever dimmed

the glory of British arms-before the struggle for the Northwest territory was ended. The American government made active preparations for the campaign of 1813. General Harrison had command of the Army of the West, with headquarters first at Franklinton, Ohio, and later at Sandusky. General Dearborn was in command of a considerable force on the Niagara river, and General Hampton led the northern division, on Lake Champlain. The intention was to invade and capture Canada, and in that way settle British pretensions to territory west of the lakes. Harrison ordered General Winchester from Fort Defiance with one thousand men to take up a position on the Raisin river, which was accomplished on January 19, 1813. Early on the morning of the twenty-second, he was surprised by a greatly superior force of British and Indians under General Proctor, with several pieces of artillery. Winchester was captured at Colonel Navarre's house, on the north side of the river, early in the fight. Colonel Lewis and Major Madison then conducted the defense. The Americans were completely routed. They fought desperately for a time, but the odds were too great. Completely surrounded and exposed to a galling fire, they were shot down by scores and the battle soon became a butchery. Seeing the futility of further resistance, General Winchester sent an order to Madison and Lewis to surrender. This they refused to do until it was stipulated by Proctor that the wounded should be transferred to Malden in sleighs and the prisoners protected from the Indians. In forming an

estimate of what followed the surrender. and British responsibility therefor, it makes no difference whether such a pledge was asked and given, or not. Under the rules of warfare they were entitled to all that was asked, without stipulation. General Proctor returned with the main body of his force in the direction of Malden, leaving a small number in charge of the wounded prisoners who still remained at Frenchtown. At Stony creek, two hundred or more of the Indians withdrew from Proctor's army, returned to Frenchtown and massacred all that remained of Winchester's gallant Kentuckian votunteers, and burned the village. It has been charged that Proctor instigated the massacre. There is no just reason for supposing that he did anything of the kind. He was a brave soldier himself, and it is incredible that so gallant an officer could be guilty of such inhumanity. But he was guilty of criminal neglect in not absolutely assuring the safety of the conquered from the tomahawks and scalping knives of his savage allies. It is no defense that he did not suspect any such awful consequences of his indifference. He knew what devilish atrocities the Indians were capable of, and he was in honor and in duty bound to make assurance doubly sure that their bloodthirstiness had no opportunity for exercise on the helpless, unarmed prisoners who relied upon his protection. Thus ended the last attempt to recapture Detroit by way of the Maumee and the Raisin. General Harrison built Fort Meigs, on the Maumee; successfully resisted a siege by Proctor with one

thousand regulars and militia and one thousand two hundred Indians; attacked the enemy and drove them off, when reinforced by General Clay with eight hundred Kentuckians; pursued Proctor and the Indians, and was ambushed by Tecumseh, sustaining a severe loss, and returned to Sandusky without having accomplished anything in the campaign commensurate with the loss his army suffered. But he never in the course of the summer's campaign missed a chance to find and fight the foe.

THE DISGRACE WIPED OUT.

Meanwhile a fleet was being built and equipped at Erie, and about the first of September, 1813, it left the harbor at Erie, under command of Commodore Oliver Hazard Perry, to court an encounter with the fleet commanded by Commodore Barclay, which had practically commanded the situation at Detroit as well as on the lake, and had thus far rendered American efforts to retrieve Hull's loss abortive. Perry was restrained by none of Hull's timidity. He was not afraid to shoot for fear that somebody might be killed or drowned. He did not stop to figure up how many widows and orphans might be made by a bloody contest with British valor on its native element. His object was to destroy Barclay's fleet and prepare the way for the transfer of Harrison's rapidly accumulating army at Sandusky to Malden or Detroit by water; and how heroically he did it on the memorable thirteenth of September, off Put-in-Bay, is so well written in all the histories and readers in the pub-

lic schools of America that it only need be referred to here to indicate its consequences.

As soon as Perry had patched up his fleet after the memorable engagement, he conveyed General Harrison and an army of twenty-five hundred men from Sandusky to the Canadian shore below Malden. Previous to departure from Sandusky, Harrison ordered Colonel Richard M. Johnson, then at Fort Meigs with eleven hundred cavalry, to hasten to Detroit and effect a junction with the main body of American troops in Canada. Without waiting for him, Harrison moved upon Malden, which was evacuated by Proctor who retreated to Sandusky, and on Harrison's approach withdrew in the direction of the Thames, seeking a position that suited him to give battle. On September 30, Colonel Johnson dashed into Detroit at the head of his cavalry. to the great joy of the inhabitants, crossed over into Canada at once, joined Harrison on October 1, and on the fifth they attacked Proctor at the Moravian towns on the Thames, eighty miles from Detroit.

Proctor's force consisted of nine hundred British troops, and fifteen hundred Indians under the command of Tecumseh, and the ground for the battle was of his own selection. Harrison and Johnson had no fears of being scalped by Indians. They gave themselves no concern about provisions. They were there to avenge the disgrace of August 16, 1812, and the Frenchtown infamy, and they went about the work with as much precision and confidence as if the

movement simply contemplated a dress parade. Even Proctor, who occupied, relatively. Hull's position on August 16, 1812, had gallantry enough to make a good fight. Johnson changed and broke the British centre, killed Tecumseh with his own hand, and scattered the redmen. Proctor and a few of his followers fled precipitately. The Americans seized his camp equipage and artillery, and made prisoners of the regulars and militia who were too obstinate to run, and Detroit was freed from occupancy by the hated redcoats. From that day to this no foreign foe has ever menaced her peace or safety.

Perry's victory and Harrison's brilliant campaign wiped out the stain of Hull's surrender, restored and established the geographical frontier of the northwest, did much to bring about an early and honorable peace, assured peace for generations to come to the

subject of these sketches, and contributed in no small degree to placing Richard M. Johnson in the vice-presidential chair and William Henry Harrison in the only higher position possible to an American citizen. Detroit was now freed from war's alarms, but was in danger of total collapse as an organized town, like a convalescing patient from whom the fever has just departed. What little business and agriculture had heretofore been enjoyed were paralvzed, and the inhabitants had to call on the government for food for themselves and hundreds of starving Indians in the vicinity. Their evil case was brought to the attention of congress, and some relief was afforded, but it was two years at least before the town recovered from the nervous, physical, commercial, political and industrial shocks it had sustained.

HENRY A. GRIFFIN.

SAMUEL S. COX'S THREE DECADES OF FEDERAL LEGISLATION.

This is not in the most complete sense of the word a history, and cannot be considered by the same standard of criticism that one would use in estimating the works of Bancroft or McMaster. The period from 1855 to 1885 covers the most important events in our history since the adoption of the constitution and Washington's administration, and while the military operations, the action of congress, the affairs of government and the contest of political parties are

related with more or less detail, but one chapter, the last, is devoted to the material progress in the three decades. This chapter is simply an analysis of the tenth census, an account of the different modes of making the enumeration that have prevailed, and of the progress and improvement in legislation thereto. It is interesting enough in its way, but fails to present strikingly our wonderful material growth. For example, no history would be complete that did not

mention the substitution of steel rails for iron and trace the great results which have proceeded from the discovery of the process of making Bessemer steel. No interest is as important in this country as that of rail transportation. We are a traveling people, and comfort and safety in making long land business and pleasure journeys are essential to our welfare. Moreover cheap rail transportation has made the settlement of the far west possible in affording an outlet for its farm produce and in bringing to the door of the western farmer eastern merchandise at a cost that has prevented the rate of living from becoming excessively high. That this has been effected we owe above all to steel rails. When we are told that railroads can do as well in 1885 if they get twelve cents per bushel for hauling grain from Chicago to New York as they did in 1872, when the tariff was thirty-nine cents per bushel, we begin to appreciate what a wonderful change there has been in rail transportation. It would, moreover, be interesting to trace the effect that the cheap land carriage in this country has had in lowering the prices of agricultural produce all over the world. Nor does the author have anything to say of the changes in manners, of the growth of culture, refinement and luxury, of the improvement in cooking at the public hostleries, of the decline of the lecture system and the rise of the theatre, of the reform of educational methods and of the literature of the period. And yet all these go to make up the annals of these three decades. The author with great propriety therefore does not call

his book a history, but entitles it 'Personal and Historical Memoirs of Events Preceding, During and Since the American Civil War,' and as such must the work be judged.

The style of the author is oratorical. It was once the fashion of writers to express their ideas in long involved sentences and attach to their main clause a number of correlative phrases, so that it was no small labor for the reader to understand what was intended to be conveyed. But under the guidance of the best masters of English, and from the study of the artistic methods of the French, it has become the aim of a writer to indicate his meaning in the clearest manner possible, and thus the use of short sentences has come in vogue. This was not, however, accomplished without some opposition by the adherents of the old method, for Macaulay somewhere mentions that there are people who do not believe that anything which is clear can be profound. Mr. Cox has carried the fashion of short sentences to the extreme, the consequent repetition of the subject makes the reading of many of his pages tiresome, and one cannot help wishing that he had made a less sparing use of his "ands," "buts," and other connectives that may be employed to produce an easy and natural flow of language.

In the narrative the chronological order has not been followed in the relation of events, but one subject has generally been exhausted before entering upon the consideration of a different topic. This method is, of course, that followed by the best historical writers,

but there seems to have been a lack of system in the arrangement of the author's material, so that there is some repetition that might have been avoided by a careful and thorough revision. This perhaps only goes to show that it is a difficult task to be a successful and active congressman and at the same time a correct author. Nevertheless the book is well worth reading, and, while from the bias of the author it is hardly the work that a father would put into the hands of his son in order that he might get right notions of the struggle between the states, yet those who are well grounded in the true faith as to the cause and import of the civil war, will find it instructive as well as entertaining. And this is no more than we should expect from the public position and intellectual acquirements of the A member of congress for twenty-four years, occupying a prominent position first in Ohio and then in New York, and treating of a great theme could hardly fail to add something that was valuable and much that was interesting to this great epoch of our history. Mr. Cox indeed is much better qualified for the work than many public men, as it is by no means his first essay in authorship.

In one respect there is a striking similarity of this book to Mr. Blaine's. The author has a good word for nearly every public man he mentions. Calhoun is "that great and good man." A speech of William L. Yancy is a "splendid effort of the Southern Demosthenes." George E. Pugh is "a rare logician." Caleb Cushing is "the elegant casuist." Crittenden's "eloquence was Cicero-

Of Jefferson Davis he says: "Remembering his personal courtesy, his urbane and dignified manners, his silvery oratory, his undaunted courage as a soldier and honesty as a man, the historian of this eventful epoch (1860-61)-in which madness ruled in the most sedate counsels-cannot fail to recall much to the credit of this leader of the Southern people." Of Senator Wigfall of Texas, we are told: "He was bitter at times, as well as classical, in his denunciations. Yet much of his strong talk and eccentric conduct was more than compensated for by great and generous qualities of heart." Robert E. Toombs was "a man of commanding person, reminding one of Mirabeau. Bating his broad Africanese dialect, he was fiercely eloquent in the epigrammatic force of his expression." Robert E. Lee "in many attributes resembled the Father of our Country." These are, perhaps, extreme instances, but in very much the same strain he passes in review the prominent Northern Democrats and Republicans. It is true, indeed, that many of his characterizations are just, but such universal lavish praise is apt to lose its value when applied to any particular well-deserving person. The reason of this tendency common to both Mr. Blaine and Mr. Cox is probably this. When the congressional historian comes to draw pen portraits of the men of his time, a crowd of personal recollections and social amenities will interfere to modify what might otherwise have been a harsh judgment on their public career. Anyone who has taken the trouble to read the eulogies

which have been delivered in Congress on the death of some member, who has not been distinguished for more than ordinary ability or virtue, will not be surprised to see in some degree the same spirit shown in the congressional manner of historical composition. It is true that this goes to show a kind fellow feeling and agreeable intercourse between our legislators and is deserving of praise, but the relation of historical events influenced by such sentiments is not true history. This is one reason why history can generally be written more impartially a generation or more after the events than at the time. Gibbon, for instance, would have written a very poor account of England during the American war, for he was a great admirer of Lord North, and indebted to him for a lucrative and easy position, but he gave us a history of Rome that has stood the test of a hundred years of criticism.

We may be sure that no critical historian will write of Jefferson Davis in the kindly words that Mr. Cox has used. Davis and the senatorial clique had in the winter of 1860-61 the destiny of the South in their hands. We all know how badly they used their power and how stupid they were in their calculation of the chances of war. After the secession of South Carolina the North was disposed to make a fair compromise and many Republicans were willing to give up something of what they had gained in Mr. Lincoln's election. Congress passed an amendment to the constitution which provided that, "No amendment shall be made to the constitution which will

authorize or give to congress the power to abolish or interfere, within any state, with the domestic institutions thereof, including that of persons held to labor or service by the laws of said state." No answer could have been more complete to the charge extensively circulated throughout the South that the victorious party proposed to meddle with slavery in the states. As shrewd politicians, Davis and the senatorial clique were justified in trying to obtain the most liberal concessions for their section, but as wise and far-seeing men, when they had obtained the utmost that the compliant North would yield, they should have accepted the terms and kept their states in the Union. It will ever be the ground of a severe indictment by the South against their representatives at Washington that, having the game in their own hands, they played the cards badly. The South can charge them with their impoverishment, and ought never to forget that personal ambition rather than the highest welfare of their states governed their leaders in the guidance of their action. It was the old story of preferring rather "to reign in hell than to serve in heaven." It was assuredly a senseless idea to base their course on the supposition that 9,000,000 people devoted entirely to agriculture would succeed in a war with 19,000,000 who were an industrial as well as an agricultural nation (for the 3,000,000 population of the border states could at best only be counted as neutral).

Mr. Cox says that the responsibility of the failure of the Crittenden compromise belongs to the Republicans. It was the only one of the various schemes proposed that could have arrested the struggle. It would have had great effect in moderating the southern excitement. Davis, Toombs and others of the Gulf states would have accepted it. In this connection the author says:

It is not an open question whether it was wise then to offer accommodations. It may not be profitable now to ask whether the thousands of old and young men, whose bodies were maimed or whose bones are decaying under the sod of the South, and the heavy load of public debt under which the people sweated and toiled, had compensation in an established order without negro slavery.

Mr. Cox means that the Crittenden compromise ought to have been supported by the Republicans. The main points of the Crittenden resolutions were that they established the old Missouri compromise line which would have made New Mexico and Indian slave territories; took away the power of congress to abolish slavery in the district of Columbia without the consent of Maryland and Virginia; provided some stringent regulations for the enforcement of the fugitive slave act, and as a concession to the North amended the law of 1850 in one respect. By its provision when a commissioner adjudged the negro brought before him a slave, his fee was ten dollars, but if he decided him a freeman, he received only five dollars. Mr. Crittenden proposed that the fee should be the same in each case. But the acceptance of the Crittenden compromise by the Republicans would have given away everything for which they had contended. If ever a political party fought a campaign for pure unadulterated principle, the Republicans did

in 1860. Starting with the strong affirmation that slavery was an evil, believing with Seward that there was an "irrepressible conflict between freedom and slavery," and with Lincoln that "a house divided against itself could not stand," they maintained firmly that congress should prohibit slavery in all the territories. Opposed to them was the Breckinbridge party, who claimed from congress the same protection to slaves in the territories that was accorded to all other kinds of property. Occupying a middle position were the supporters of Douglas-one of which was Mr. Cox-whose position was that the question of slavery should be left to the decision of the inhabitants of the territories themselves, or as their standard-bearer put it, "he did not care whether slavery was voted up or down," so long as the people of each particular territory determined the matter. their platform, which was thoroughly discussed in all the free states, the Republicans elected their candidate. To accept the Crittenden compromise was to sacrifice their dearest principle, and would have demonstrated that the party had no reason for existence. Lincoln, with the clear head that actuated all his utterances, wrote to E. B. Washburne, December 13, 1860:

*Prevent as far as possible any of our friends from demoralizing themselves and our cause by entertaining propositions for a compromise of any sort on slavery extension. There is no possible compromise upon it but which puts us under again and all our work to do over again. Whether it be a Missouri line or Eli Thayer Popular Sovereignty, it is all the same. Let either be done and immediately

^{*} North America Review, November, 1885.

filibustering and extending slavery recommences. On that point hold firm as a chain of steel.

Nor was this advice unnecessary, for, as in 1850, strong pressure was brought to bear by the commercial classes on congress to do almost anything to avoid an open rupture, and the feeling was widely extended that something ought to be patched up which would save the Union and prevent business from being paralyzed. That under this influence some Republicans were ready to barter away their principles is well known, but it will ever remain to their credit that their leaders held firmly to their fundamental doctrine and prevented the enactment of the Crittenden compromise measures.

In attempting to forecast what will be the final judgment of history on these events, it is well to bear in mind who will be the men that will make up the estimate of posterity. Men born since the close of the war will vote at the next presidential election, and in a generation from now all who took any active part in the contest will have passed away. When the simple naked facts are presented, when it is shown that Davis and his clique fostered the breaking up of the Union in order that, as they vainly and foolishly thought, they might have better protection for their institution of property in their fellow man, can there be any doubt as to what will be the judgment of the future generations? The spirit of history will show them on the one side slavery and on the other freedom-and in Jefferson Davis will be seen the incarnation of slavery. No "personal courtesy," no "urbane manners," no "silvery oratory," will in any degree mitigate this fact; that Davis was in church when Lee sent word that he could no longer hold Richmond, will not be remembered to his credit. For the officers and soldiers who fought so bravely for an unjust and doomed cause, the feeling shown at General Grant's funeral demonstrates that now, towards them only, the kindliest feelings prevail, but the man who was the head and front of the rebellion can only go down into history as a more infamous conspirator than Aaron Burr, and as representing, in a century of progress and light, the principles of darkness and oppression.

It is not necessary, however, to wait for the judgment of posterity to hold tenaciously the opinion that the Republicans were clearly in the right when they refused, in the winter of 1860-61. to make any compromise on the question of slavery in the territories. Public sentiment in the North is pretty well settled on that point. The only excuse for alluding to the question is from the position taken by some distinguished writers, of whom Mr. Cox is one example and George T. Curtis, in his 'Life of James Buchanan,' another. These two men magnify all the evils of the war, and, while admitting slavery to have been a great wrong, cannot bring themselves to the belief that the results of the war were worth all that it cost. Some good people, who share these ideas, are fond of figuring how much would have been saved had we paid the South for all their slaves and avoided the fratricidal contest. Mr. Cox shows

the war expenditure to have been over \$6,000,000,000, and the indirect losses, without taking into account the value of slave property, increased the total national loss to nearly \$11,000,000,000 (p. 217). Senator Brown of Mississippi claimed, in 1861, that the value of the slaves and property dependent on the existence of the institution was \$4,000,000,000. It requires no argument to be convinced that an expenditure of \$4,000,000,000 is better than one of \$11,000,000,000, provided the same results are accomplished. But the question is by no means a practical one. In 1861 the proposition to have incurred a national tax to pay the South for their slaves, would have staggered the North. Nor would the South have accepted the proffer. No one can understand the cause of the war, unless he appreciates that the peculiar institution had developed a pure aristocracy, whose existence depended on slave labor. The government of the southern states was that of an oligarchy. Of all systems none are more selfish, and all history goes to show that rarely has an aristocracy given up the very base of their being, except through the shock of civil war. Mr. Curtis seems to think that, in some mysterious way, slavery would have eventually been abolished by the southern states themselves had it not been for the agitation and attacks on the institution by the northern abolitionists. The teachings of history, however, in general, and the course of events from 1820 to 1860, will not bear him out in this position.

There is one valuable lesson in human

nature to be learned from this book, and that is how loth public men are to admit that they were mistaken on any great issue. Mr. Cox says (p. 221):

The Federal administration, had it disregarded the whisperings of the fanatics, could have restored peace to the land, and the "Union as it was." It could have done this before a shot was fired or a bayonet crossed. Was it any wonder then that the Democratic party, which had sprung to arms at the first call of "Save the Union" was, at every step of the struggle, outspoken for and anxious to make peace?

I imagine that a generation hence when an impartial historian shall tell the story of the civil war, he will have a great deal more charity than had the Republicans at the time for the Democrats, who faithfully obeyed all the laws and yet criticised President Lincoln's emancipation policy; but, judging their action in the light of after events, he will have to say that their course was a great mistake. Mr. Cox himself comes somewhere near admitting this when he couples together Washington, Lincoln and Grant as the defenders of American liberty and preservers of the Union. (p. 673). In the first case it is the Democratic politician who speaks, and in the second it is the broad-minded historian. Surely anyone who ranks Lincoln as next to Washington of the benefactors of our country, avers a belief in the happy results that have flowed from his conduct of the war; and this must mean that the emancipation policy was based on the large principles of wisdom, justice and humanity.

Mr. Cox devotes three chapters to a brief summary of the military events of the war. While no attempt is made to describe any of the battles in detail, the results of the main actions are emphatically noted and the main points are effectively set forth. These chapters are good reading for anyone who wishes to revive his recollection of the principal incidents of the war and will enable one to appreciate the concise statement of the author as to the general course of the military operations:

As a result of no one of their victories did they (the Confederates) gain ground that they could hold longer than a few days or weeks; whereas they were losing ground from the beginning to the close of the struggle. (p. 198).

To non-military readers this brief narrative will seem refreshing after the perusal of the minute and detailed accounts of battles of which the current magazine literature has been so full. Indeed in reading many of these latter descriptions, one ignorant in war-like matters can not at times help feeling with Carlyle that, "Battles ever since Homer's time, when they were fighting mobs, have mostly ceased to be worth looking at, worth reading of or remembering."

Those who believe that the weakest part of Mr. Lincoln's administration was the military arrests and convictions of persons alleged to have given aid and comfort to the enemy by their public utterances, will read with great interest the portion of this work devoted to that subject. Mr. Cox attributes this course almost wholly to the vindictive policy of Stanton. The arrest which caused the greatest excitement was that of Vallandigham, which is thus related:

General Burnside sent a portion of his staff in citizens' dress to Mount Vernon, Ohio, to report

Mr. Vallandigham's speech. As the testimony turned out, and as the author of this book testified on oath, fortified by Vallandigham's statement, the words alleged against the latter were spoken by the writer (p. 196.)

It was hardly surprising that some such mistake should have been made, as one of the important witnesses at the trial by the military commission deposed:

I took no minutes during the delivery of the speech. After Pendleton commenced speaking I went and wrote out what I had heard. It was perhaps an hour and a half after I heard the speech.*

In the calm and quiet of our present days, few can read the proceedings of this commission without feeling that the trial was a travesty of justice; and, indeed, it was so regarded at the time by many of the influential Republican journals. Aside from the question of right involved, the trial and conviction were not in accordance with the wisest policy. Vallandigham became a martyr, and the Ohio Democrats, in a spirit of bravado, nominated him as their candidate for governor. It was unwise, then, to have forced this issue upon one hundred and eighty-five thousand citizens, who were impelled to protest, by their votes, against arbitrary arrests and military tribunals. Unquestionably, no one appreciated this better than Mr. Lincoln himself. In his reply to Erastus Corning, who was chairman of a public meeting at Albany, that had passed resolutions denouncing the arrest of Vallandigham, and had transmitted the same to the President, he wrote:

And yet let me say that, in my own discretion, I do not know whether I would have ordered the ar-

^{* &#}x27;Appleton's Annual Cyclopedia,' 1863, p. 477.

rest of Vallandigham. While I cannot shift the responsibility from myself, I hold that, as a general rule, the commander in the field is the better judge of the necessity in any particular case.

And again:

It gave me pain when I learned that Mr. Vallandigham had been arrested—that is, I was pained that there should have seemed to be a necessity for arresting him.*

While considering this subject, Mr. Cox makes a personal allusion as follows:

Is there any incident connected with these events in relation to personal freedom touching the author? There is none so significant to him and his, as the fact that he was compelled, in the city of Columbus and in the state of his birth, to keep at his bedside a rope connected with a bell to warn the population—who were averse to a repetition of the Vallandigham outrage—of any arrest upon the person of their elected representative.

Mr. Cox also refers to a book called the 'American Bastile,' which is "a history of the illegal arrests and imprisonment of American citizens during the civil war," and which gives a list of over a hundred of the victims of the bastile" (p. 225). Now, if this be the sum total the amount of mischief done was not great, considering that the very existence of the Republic was in danger. I am well aware that in attacks on constitutional liberty and in breaches of personal freedom, it is the majesty of the principle involved rather than the number of the victims that excites the indignation of a free people. may rest assured that posterity would have had no sympathy with Vallandigham had he not been made, for the time being, a martyr. Results have shown that the policy he advocated was a terrible mistake, and that he was one

of those men who could not or would not see that the abolition of slavery "was inevitable, was necessary, was planted in the nature of things."

No partisan, however, will ever do justice to this portion of our history. On one side was the vast majority of the Northern people, who had the most supreme confidence in Mr. Lincoln, who were willing to follow wherever he led, and who felt that severe criticism of his policy was absolute treachery to the country. On the other side was a large minority, the Democratic, or, as they were called, the Copperhead party. These were made up for the most part of law-abiding citizens, of men who paid their taxes, who submitted to the decision of the ballot box, but who were vehement in their opposition to what they called the "negro war," and who thought that in declaring for "the Constitution as it is and the Union as it was," they were proclaiming a great, sublime principle. The action of some men in power, whose zeal outran their discretion, and the intemperate attacks of the press unquestionably had the effect of increasing the bitterness of their utterances. The remark of Mr. Seward, indiscreetly made and indiscreetly reported, added fuel to the flame. Mr. Cox, of course, quotes the observation. The secretary said to Lord Lyons:

My Lord, I can touch a bell on my right hand and order the arrest of a citizen of Ohio. I can touch a bell again, and order the imprisonment of a citizen of New York; and no power on earth, except that of the President, can release them. Can the Queen of England do as much?

There is nothing, however, in Mr.

^{* &#}x27;Appleton's American Encylopedia,' 1863, p. 802,

flects in any degree on Mr. Lincoln. Unquestionably, had many of his subordinates had his poise of judgment and never-failing charity, this business would have been in many respects managed differently. In the letter to Erastus Corning (from which I have already quoted), he shows how he could in the very dark days of 1863 meet his Democratic opponents to a certain extent on their own ground, and his discussion of the points at issue exhibits a kindliness of feeling joined to considerations of the wisest policy. Of this, indeed, there are many examples in Mr. Lincoln's career, and they serve to present him as a broad-minded man who could grasp all sides of any question. I can do no better in this connection than to quote Mr. Cox's tribute to him:

It was almost a peculiarity of Mr. Lincoln, among the great men of history, that all his public and private utterances bear the impress of an honest, conscientious regard for whatever he believed to be right and wise. Though "popular beyond all others of his time," he never sought station or advancement by the sacrifice of the public welfare on the shrine of party or personal ambition. He was singularly free from sectional and partisan passion and animosity. It was a privilege of the writer to see him often while he was in the possession of his great office, and to hear him converse upon public affairs. At no time did Mr. Lincoln utter a harsh or unkind word in regard to political opponents, or toward the insurgent South. . . . He could always rise up to the occasion. He possessed a clear and vigorous understanding, and a sincere love of truth. In broad humanity and in devotion to country, Abraham Lincoln stands the peer of the purest and greatest men of whom history leaves a record" (p. 345).

Our author gives us fourteen chapters on "Reconstruction." This is a dreary period of our history. The intemperate

Cox's treatment of this subject that reflects in any degree on Mr. Lincoln. Unquestionably, had many of his subordinates had his poise of judgment and never-failing charity, this business would have been in many respects managed differently. In the letter to Erastus

The country well remembers Mr. Johnson's escapade in 1867, in company with his cabinet. It was known as "swinging around the circle." It was while on that somewhat extraordinary "progress" that he indulged in some wretched rhetoric at the expense of the majorities in the two houses of congress."

On the other hand, the wholesale plundering of the South by the carpetbag governments goes to show that the congressional policy was by no means statesmanlike and wise. The question was a difficult one, and the way it has been resolved demonstrates that the country suffered an irreparable loss in the death of Mr. Lincoln. He could have brought us through the trying times safely and wisely. His assassination, moreover, embittered the North against the South, and feelings of revenge had their place in determining the action of congress. As representing a more merciful course, President Johnson was entirely unfitted by nature, education or training to solve any such complex problem.

The chapters on the electoral commission and electoral count of 1877 are, perhaps, the most entertaining of the book. Mr. Cox does not state the case too strongly when he says:

In the history of elective governments no such strain was ever put upon human nature as that which tried the patience, forbearance and patriotism of the people of this country during the proceedings for the counting of the presidential vote in 1876-77.

A case like that one could never occur again without sanguinary results. . . . There seemed to be no alternative but civil war. . . In the wisdom and patriotism of congress was now the only reliance for averting bloodshed (pp. 636, 637).

I am quite sure that the experience of those who were in a position to know, and were well qualified to judge, will bear witness to the truth of these statements. Had things been allowed to drift along without some settlement, there would have been great danger of a fight in the capitol when the time arrived for counting the electoral vote. As one representative said to another of the opposite party: "Is it not terrible to think that within a few weeks we shall be cutting one another's throats in this chamber?"

A fight in Washington would have been the signal for trouble all over the country. Business had been bad for more than a year and was still further depressed by the disputed presidency. The number of men out of employment that winter was very large. What we saw a few months later, during the railroad riots, was only a slight indication of the state of anarchy we might have had in the case that our constituted authorities had begun fighting among themselves at the capital. The country, then, can never be too grateful to the able and patriotic men of the senate and house, who devised the scheme of the electoral commission. Cleveland's re-

presentative, Mr. Payne, was chairman of the house committee, and bore a highly honorable and influential part in smoothing many difficulties that lay in the way of a reasonable settlement. Some of these efforts are clearly described by Mr. Cox, but there were many conferences in which manly arguments were used with his colleagues to induce them to rise to the patriotic height which the occasion demanded, that have not, I believe, ever seen the light of a printed page.

We are not yet far enough removed in point of time to estimate, with the judicial fairness that the spirit of history demands, the events immediately following the election of 1876, the arguments used on each side before the commission and the decision of the commission itself. The occurrences are all too fresh in our minds, and our opinion cannot fail to be more or less colored by what were our partizan predilections. Mr. Cox has presented the Democratic side with vigor, and his statements will be cordially assented to by all of his party. And yet those who believe that Mr. Hayes was de jure as well as de facto President cannot do better than to read these two chapters if they would like a succinct account of the matter and a fair presentation of the facts from the Democratic standpoint.

TAMES F. RHODES.

PITTSBURGH.

VIII.

GLASS AND GLASS-MAKERS.

A HISTORY of glass and glass-making would embrace a period commencing five thousand years before Christ and running to the very doors of to-day. The earliest record of this wonderful art that has yet been discovered was found in the ruins of Memphis, the city built by Menes, the first king of Egypt, whose reign is placed by one eminent authority as five thousand and four years before the Christian era. The wrapped and embalmed dead found in the tombs of that ancient city were adorned with necklaces of paste-glass beads, and beyond any doubt the art was known and practiced long years before they were laid away in their silent centuries of rest. To touch each point at which the maker of glass has left an imprint upon his age would be to write a most expansive book, and carry us from Egypt and Phœnicia to Rome, from Tyre and Sidon to Thebes, into Palestine, and on downward through all the nations of the ancient world. The product of this art being used for ornamentation as well as for practical purposes, it has occupied a more important place in the world, apparently, than many pursuits that were of more practical benefit to man. Glass and glass-making are met in almost every corner and turn of the higher forms of world, and the makers of glass were

social life in the ancient world, and many a pictorial representation is seen of the primitive glass-worker at his labors. In Mr. Joseph D. Weeks' admirable report in the national census for 1880, I find the following reference to the Egyptian methods of making glass:

The processes used by these early glass-makers were, in many respects, similar to those of the present day. The "batch" was melted in crucibles, and the glass-blower's tool pictured on the Beni-Hassan tomb might well be taken as a representative of those in use at Pittsburgh to-day. Cast glass appears to have been a common product both of the Egyptian and Phœnician glass houses, and molds were also used both for blowing and for pressing. Some of the hollow ware gives evidence of having been made on hollow molds, and other specimens indicate that the glass was molded around a core or "former" of sand. Pressed glass, however, was not made as American pressed glass is formed, a die being used, into which the glass was pressed, or the die was pressed into a mass of pasty glass. The perfection to which these processes were carried, however, will not compare with that attained to-day.

The ancient records and specimens of ware that have been preserved, show clearly that in Assyria, Greece, Carthage, Rome and Etruscia, the making of glass was known, and in some places carried to a high degree of perfection and skill. When Constantine, the Great, made Byzantium his capital, three hundred and thirty years after Christ. he attracted to him the artificers of the

among them. In the beginning of the fifth century the glass-makers were exempt from taxation. Gaul and Spain made glass in their early days, and there are evidences to show that Germany learned the trade during the years of Roman occupation; and it is probable that these early and restless masters of the world also planted the new art on the British isles.

The glass-maker was among the earliest artisans that found a home in the new land across the sea, although, from the nature of his occupation and the quality of the market to be found here, one would more naturally expect to see him among the last. Traces are found of a glass manufactory in Virginia in 1608 and 1609, and it is fairly well established that a glass house was erected in the woods near Jamestown. In 1621 an attempt was made to revive the industry which had already fallen into decay, for the purpose of making glass beads to trade to the Indians. The results of this experiment are uncertain, and the history of the industry for a number of years thereafter is vague and fragmen-That a glass house existed in Alexandria, Virginia, in 1787, is established beyond much doubt. The first evidence of the extension of the business into Pennsylvania is found in a letter written in 1683 by William Penn, who seems to have had a keen eye for all the material advantages to be gained by his new colony. He speaks of a glass house as among the few industrial establishments possessed by it. "Where this glass house was located," says Mr. Weeks, "or for what kind of glass it

was intended, is not known; indeed it is doubtful whether the works were ever used for the purpose for which they were erected. If they were, they proved unsuccessful, as did most of the early glass works in the colonies, and were abandoned." About 1770 Baron Steigel built a flint-glass manufactory at Manheim, near Lancaster, which seems to have been the first attempt in Pennsylvania after the fruitless endeavor recorded above. This also proved a failure because of the war, and was abandoned. In 1771 another attempt was made in Philadelphia, when Robert Towars and Joseph Leacock purchased a piece of land jointly, and erected upon it a glass house and furnace. This factory made green bottles and probably flint ware; and under the control of other parties it continued in operation for a number of years. There is evidence to show that other establishments of a like character were erected in eastern Pennsylvania between 1776 and 1800, and one factory is known to have existed at the falls of the Schuylkill.

Traces of the impress of the art are found here and there all through the early history of the United States. In obedience to a resolution of the first congress of January 15, 1790, Mr. Alexander Hamilton, secretary of the treasury, laid before the house of representatives an able and voluminous report on the subject of manufactures in the new and struggling nation. In that document he touches on glass, as follows:

The materials of glass are everywhere found. In the United States there is no deficiency. The sands and stones called *tarso*, which include flinty and crystalline substances generally, and the salts of various plants, particularly of the sea-weed kali or kelp, were the essential ingredients. Fuel was abundant for such manufactures. They, however, required large capitals and much manual labor. Different manufactures of glass were on foot in the United States, and received considerable encouragement in the duty of two and a half per cent. If more was given, a bounty on window-glass and black bottles would be the most proper. Bottles were an important item in breweries, and a deficiency was complained of.

In 1793 a Boston glass company, incorporated six years before, commenced in that city the manufacture of windowglass, in a new factory of large size and improved construction; and in 1794 we find parties asking congress for additional duties on window-glass. Of the beginning of this great industry, that has since assumed such proportions, in western Pennsylvania, little is known with exactness, although the general facts are well accredited and substantially agreed upon. It has been generally claimed that the first glass-works erected west of the Alleghany mountains were those of Albert Gallatin, at New Geneva, on the Monongahela river, some ninety miles south of Pittsburgh. The best authorities attainable, however, are found in Mr. Weeks and Mr. Isaac Craig of Pittsburgh; and they agree that Craig & O'Hara of Pittsburgh have the precedence of Gallatin by a month. Gallatin made window-glass, his furnace being a small one, with eight pots, and using wood for fuel. A number of German glass-workers were secured by Mr. Gallatin and set to work, and for a time the undertaking was quite profitable, as there were at that period only two or three window-glass factories in the country.

The date of Gallatin's venture was probably 1797.

In 1796 Major Isaac Craig and Colonel James O'Hara began to make arrangements to lay the foundation of the industry in Pittsburgh, and in order to command the best service of which the country was capable, an arrangement was made with Peter William Eichbaum, a skilled workman who had come from Germany and filled the position of superintendent at the glass-works at the falls of the Schuylkill, above mentioned, to take charge of the erection of the works. The building of the furnace was commenced in 1797. The works erected were frame, containing an eight pot window-glass furnace, with coal for fuel. These gentlemen, it may be said in passing, were among the first, if not the very first in the United States to use coal instead of wood. "It was not the force of circumstances or the lack of wood that led to the use of coal, but it was the deliberate design of the promoters of this enterprise to melt their glass with coal, and it was the character of the coal in Coal hill that determined the location of the works.* The use of coal in the state of the art at this time required considerable determination and risk, and it is to the credit of these gentlemen that they dared to use it." One or more pots in this furnace were devoted to the manufacture of bottles. Messrs. Craig and O'Hara were associated in this partnership for seven years,

^{*}On Coal hill, south side of the Monongahela river, just above its junction with the Allegheny, the Point Bridge works of Thomas Wightman & Co. occupying it at present.

conducted the business alone. The experiment was one of risk and uncertainty from the first. The workmen were not always easy to handle, and it was difficult to get others to fill their places. In 'Bishop's History of American Manufactures' we are told that in 1802 "additional glass works were built in Pittsburgh by General O'Hara, who made preparations to manufacture white and flint glass, and sent an agent to England to obtain workmen, in which he was unsuccessful."† Trouble was found in obtaining the proper materials, the clay of the neighborhood on which they had depended not answering the purpose, and its place being supplied with that of New Jersey, which could only be brought over the mountains at the greatest expense. In those days when the canal and railroad between Pittsburgh and the east had not been even dreamed of, sand could not always be had as desired. But the men who had the enterprise in hand were of great courage and indomitable energy, and they worked ahead in a manner that compelled results. In a letter written by Major Craig in 1803, after detailing some of the above difficulties, he says:

We have, however, by perseverance and attention brought the manufacture to comparative perfection. During the last blast, which commenced at the beginning of January and continued for six months, we made on an average thirty boxes a week, of excellent window-glass, besides bottles and other hollow ware to the amount of one-third of the value

when the former withdrew and the latter of the window-glass, eight by ten selling at \$13.50, ten by twelve at \$15.00 and other sizes in proportion.

About 1800 the second venture in Pittsburgh was made by Denny & Beelen. whose works were located on the north side of the Ohio river, in what is now known as Manchester. Its production was in the line of window glass. The enterprise was never successful, and after a time was given up. In the year above mentioned, Messrs. Craig & O'Hara made the first attempt west of the mountains to manufacture flint glass, employing for that purpose an expert who had lately come from England. The works were then under lease to Eichbaum, Wendt & Company, and with their consent the trial was made. While the result was satisfactory, nothing came of the experiment at the time, as the proprietors of the works did not seem to be prepared to extend their operations in that direction. The real beginning of that industry came later, as the following shows:

In the fall of 1807 Mr. George Robinson, a carpenter by trade, and Mr. Edward Ensell, an English glass-worker, who had been a manufacturer of both window and flint glass at Birmingham, England, and had sold his works and come to this country to better his condition, commenced the erection of a flint glass works at Pittsburgh, on the bank of the Monongahela, at the foot of Grant street, under the firm name of Robinson & Ensell; but the partners appeared to have lacked capital and were unable to finish the works, and the establishment, in an incomplete state, was offered for sale, probably without having made any glass. In August, 1808, Mr. Thomas Bakewell and his friend Mr. Page, who was visiting Pittsburgh at the time, were induced to purchase the works on representation of Mr. Ensell that he thoroughly understood the business. This was the beginning of the firm of Bakewell & Page, that by itself and successors has continued the manufacture of flint glass to the pres-

⁺ Mr. Weeks in his census report discredits this statement.

ent, Bakewell, Pears & Co., their direct successors, reporting to the present census.*

The furnace as completed in 1808 contained six twenty-inch pots, and was replaced two years later by one of ten pots, while in 1814 still another furnace of like capacity was added. The works were destroyed by the great fire of 1845, but soon rebuilt. The experiment to which Messrs. Bakewell & Page had committed themselves was a risky and trying one, but they finally surmounted all difficulties, and were rewarded by an unquestioned success. By 1812 the other glass establishments of this character had been erected, although one of them resulted in failure.

The progress of glass-making in the United States can be glanced at briefly here, as set forth in a report on the subject of manufactures presented by Mr. Albert Gallatin, secretary of the treasury, to the national congress in 1810. Under the head of "Earthen and Glassware," he declared that sufficient pottery of the coarser kinds was made everywhere, and information had been received of four manufactories of a finer kind lately established. "One in Philadelphia," it continued, "with a capital of \$11,000, manufactured a species similar to that made in Staffordshire, England, and the others in Chester county, Pennsylvania, in New Jersey, and on the Ohio made various kinds of queensware." Information had also been received of ten glass manufactories, which employed about one hundred and forty glass-blowers, and made annually twenty-seven thouThe importations of window-glass were twenty-seven thousand boxes, the extension of the domestic manufacture, which supplied precisely one-half the consumption, being prevented by want of workmen. Some green bottles and other ware were made, and two works, employing together six glass-blowers, had lately been erected in Pittsburgh, and made decanters, tumblers, and every other description of flint glass of a superior quality.

Four years later we find it recorded in 'Cramer's Navigator,' that the manufacture of glass in Pittsburgh had "succeeded as well as the most sanguine had expected; the situation of this place is particularly favorable, notwithstanding some disadvantages in procuring some of the materials. There are two glass works on the opposite side of the Monongahela, erected by Trevor & Ensell, and one in the new town of Birmingham, under the firm of Beltzhoover, Weldt & Co. These, with the three before erected, to wit: O'Hara's, Robinson's and Bakewell's, will be able to manufacture to the amount of \$160,000 annually. Both flint and green glass are now made here to great perfection." The business grew rapidly after it had once obtained a fair start, and gave promise of a permanent life, when the depression that followed the war of 1812 fell upon the country, and glass-making suffered with the other industries. The full stress of the trouble was not felt until 1819, which seems to have been its

sand boxes of window-glass of one hundred square feet each. "That of Boston made crown glass equal to any imported, all the others green, or German glass, worth fifteen per cent. less; that of Pittsburgh used coal, and the others wood for fuel." In conclusion the report said:

^{*}Since the above was written the firm has gone out of the glass business.

culmination. From one hundred and sixty-nine persons employed in Pittsburgh in 1815, in the glass works and at glass-cutting, a reduction to forty was made by 1819; while the product in that time fell from \$235,000 to \$35,000, that in flint glass alone having been \$75,000.* As prosperous times returned, and the business became more securely established and better protected, it took on a steady and healthful growth and began to show signs of becoming the great and useful industry it is to-day. In 1820 the city produced glass of various kinds to the value of \$44,000. In 1825 her seven glass-works, including the one at Geneva, made twenty-seven thousand boxes, valued at \$135,000, in addition to \$30,000 worth of white and flint glass, while \$100,000 was probably exported. We are told that at that date Pittsburgh glass undersold the imported in eastern cities, and received the premium, over numerous specimens, in the Franklin Institute. In 1831, we learn from the census report quoted from heretofore, there were in Pittsburgh four flint houses and four window-glass houses, and nine other establishments of like character in the small towns located near, while the annual product was estimated at half a million dollars. Six years later there were thirteen factories in the same vicinity making \$700,000 worth annually. In 1831 the tariff convention of the Friends of Domestic Industry, composed of members from all parts of the United States, received a report from

its committee on glass and manufactures of clay, from which these general points are gleaned: They reported twenty-one furnaces in the United States, containing one hundred and forty pots for the manufacture of flint glass. Their total product of flint glass was \$1,300,000, of which \$400,000 was made in two of the largest at Boston. much of the latter consisting of cut glass. The manufacture had been greatly improved and extended under the protective duty of 1824, and the price was fully one-third less than in 1816. Few, if any, orders were sent abroad for flint glass by American merchants. But one factory of black glass bottles, carboys, etc., was known to exist, and that was near Boston, with a capital of \$50,000, and employing sixtyfive men and boys. Its product was six thousand gross annually. Crown window-glass was made near Boston to the value of \$100,000. The largest manufactory of green bottles, etc., was near Philadelphia, employing near three hundred men and melting about twelve hundred tons per annum. There were twenty-three manufactories of cylinder window-glass, four of which were at Pittsburgh. The total value of the glass made in the United States was about \$3,000,000; the number of persons employed, 2,140; wages annually paid, \$720,000. In 1837 pressed glass tumblers and other drinking vessels were first made, the process of making them being an American invention.

Returning to Pittsburgh, we find the business to have so increased that by 1857 there were thirty-three factories in

^{*} Bishop's 'History of American Manufactures,' Vol. II., page 250.

the city, of which nine produced flint glass, and twenty-four window, green and black glass, to the value of \$2,631,-990, employing 1,982 hands, whose wages amounted to \$910,116, and consuming material to the amount of \$2,078,734.40. In 1865 there were fortyfive houses of various kinds, with a product the estimated value of which was \$6,700,000. The pressure upon these works at that time is best shown by the fact that, although only customary to run them for ten months in the year, yet many of them had run twenty-one months without stopping. The fifteen flint glass-works then in operation at Pittsburgh produced about four thousand two hundred tons of glassware, worth then in round numbers two million dollars. Their capacity was, however, double the amount produced, or about eight thousand tons.

In 1880 the number of works in Allegheny county had increased to fifty-one, of which twelve were window, thirty flint, and nine green bottle. The value of these works was \$5,481,000, and other enumerations connected therewith may be given as follows: Number of furnaces, 85; number of pots, 797; employés, 6,053; total wages paid, \$2,686,425; value of materials used, \$2,139,658; total value of product, \$5,668,212. These figures give to this county 24.17 per cent. of the total number of glass establishments of all kinds in the country; 27.62 per cent. of all the capital invested, and shows that it produced 26.79 per cent. in value of the products. Of the total of the entire country in the three classes-window, flint and greenthe county had almost twenty-five per cent. of the establishments, thirty-two per cent. of the capital, and made in value twenty-eight per cent. of all the product.* A better idea of the growth of this great industry in Pittsburgh can be found in the following table than could be conveyed in any other form:

YEAR.	works.	VALUE.
1797	1	\$ 10,000
1800	I	10,000
1810	3	70,000
1815	5	235,000
1831	8	500,000
1857	25	2,631,990
1870	32	5,832,429
1880	51	5.668.212

It cannot but be regretted that the active and venturesome men who planted at such cost and labor this thriving business in western Pennsylvania, did not leave more detailed records of their trials and experiences, as the story would have been one of absorbing interest. But those were stern, trying days, and the founders of the industry had more pressing things to think of than the wishes of posterity. Some glimpses of them can be caught here and there in the above meagre notes, and they have left a monument more enduring than words in the trade in glass which Pittsburgh holds with all the corners of the world. These pioneers have also been followed by worthy successors, and we can do the future no greater service than to gather up and place in permanent historical record some portion of the labors and trials by which they have

^{*} These figures are taken from the United States census report for 1880, as are also those in the table.

so ably built on the foundations their vania railroad. Owing to a failure of predecessors had laid.

JAMES B. LYON.

No article touching the glass business of Pittsburgh could be complete without more than a passing reference to Mr. James B. Lyon, who has not only held a commanding position therein for many years, but has marked out for himself new paths and followed them to a large manufacturing and financial success. He is a native Pennsylvanian in every meaning of the term, his ancestors, of Scotch-Irish stock, having settled in Juniata county as early as 1763. His father, John Lyon, was born in Juniata county, and went into the iron business as early as 1812, and continued in it until his death in 1868; and the extent of his business and the marked influence he had on the iron development of the country will be thoroughly understood when it is remarked that he was the head of the great house of Lyon, Shorb & Co., one of the oldest and largest establishments of its kind in Pennsylvania, having works in Centre, Huntingdon, Blair and Clarion counties and Pittsburgh. James C. Lyon was born on April 21, 1821, at Pennsylvania Furnace, Centre county. After the completion of his academic course, he entered into the employ of Messrs. Lyon, Shorb & Co., in 1841, having been brought to Pittsburgh by his parents in 1834. He remained in this position until 1847, when he entered into the banking business at Hallidaysburgh, on the line of the old Portage road, which afterwards became a part of the Pennsyl-

health consequent on such a sedentary occupation, he was obliged to withdraw from the banking business, and on January 1, 1849, made the most important business step of his life by embarking in the manufacture of flint glassware as a member of the firm of Wallace, Lyon & Co., on the corner of what is now Thirteenth and Railroad streets. March of that year, less than three months after his entrance into the business, the whole establishment was destroyed by fire. The insurance was not sufficient to cover the loss, and the discouragement was great. The firm, however, went to work and rebuilt, and was at work again in a few months. In the spring of 1851 he purchased the interests of his partners, and continued the business under the firm of James B. Lyon & Co. In 1852 the firm purchased the property and works on the corner of Thirtieth and Railroad streets, on the Allegheny river, known as the O'Hara glass works, so named in honor of General James O'Hara, the pioneer in the glass business west of the Alleghany mountains. The establishment, at the time of purchase, consisted of but one ten-pot furnace, and was soon increased to three. A few years after the three furnaces were taken down and two large furnaces, the largest then built, erected with a larger capacity, the main object being to economize in fuel and furnish more room. The glass business in 1849 was in a primitive state compared with what it is at this time. The furnace of 1849 had ten pots of a capacity of 1,500 pounds batch each.



Jas BLyon



The pots were filled and melted but once in a week. In the furnace of to-day the capacity of the pots is 3,500 pounds batch, and melted three times a week. Thus one furnace has a capacity of seven times as great as formerly. The product at that time was mainly of articles blown into the desired shapes; now it is mainly pressed in moulds which gives the opportunity to produce new and more beautiful patterns at prices within the reach of all classes.

In 1840 there were only five flint glass establishments in this city, one having gone out of business the previous year. Now there are not less than twenty in the city and its immediate neighborhood, and probably as many more in the western country. Comparing the aggregate product of all these factories on the basis before mentioned, some conception may be had of the immensity of the business. Up to the close of the war the materials used were sand, pearlash, red lead or litharge, and nitrate of soda. Now soda-ash and lime have been substituted for pearl-ash and lead, making, with the reduction in the price of the other materials, the cost of the batch less than one-fourth. The quality of the glass is fully equal and much more uniform, and only lacks the clear, silvery ring of the lead flint glass. The improvement in the machinery and tools for pressing glass has been steady, and the workmen are able to turn out more than double the quantity of ante-bellum times. The most remarkable change is in the prices at which glass is selling, the same articles now selling at not more than one-third that of 1860. This,

The pots were filled and melted but too, while the wages of workmen are once in a week. In the furnace of to-full fifty per cent, more.

The pots in which the material is melted are made from clays, imported and native, mixed together with a large proportion of the old and used pots broken up and picked clean. As much depends on the pots, the greatest care is taken in the preparation of the materials. About three months is required to prepare them, and it is not safe to put a pot into the furnace until it is at least four months old from the time it is finished. The duration of the pot varies, but averages about four months, when coal is used as a fuel; with the use of natural gas they will average fully six months. 'The O'Hara glass works were the first to apply the natural gas as a fuel in the manufacture of glass in this city. Its advantages over coal are many, among others the greater durability of the furnaces, the regular uniform heat so essential to making glass of a good quality, the saving of labor, and its cleanliness. The cost is not greater than one-half of coal. While Pittsburgh has in this fuel a great advantage over places out of reach of it, it is not to be expected that it will always be so. Those who have large plants in other places cannot remove them to the gas territory, and cannot afford to leave them idle and go to waste. They will be forced to work out some methods by which gas will be made from coal and more economy practiced in the use of it. It is already claimed that gas is being made from coal at a cost no greater than natural gas is costing consumers in Pittsburgh.

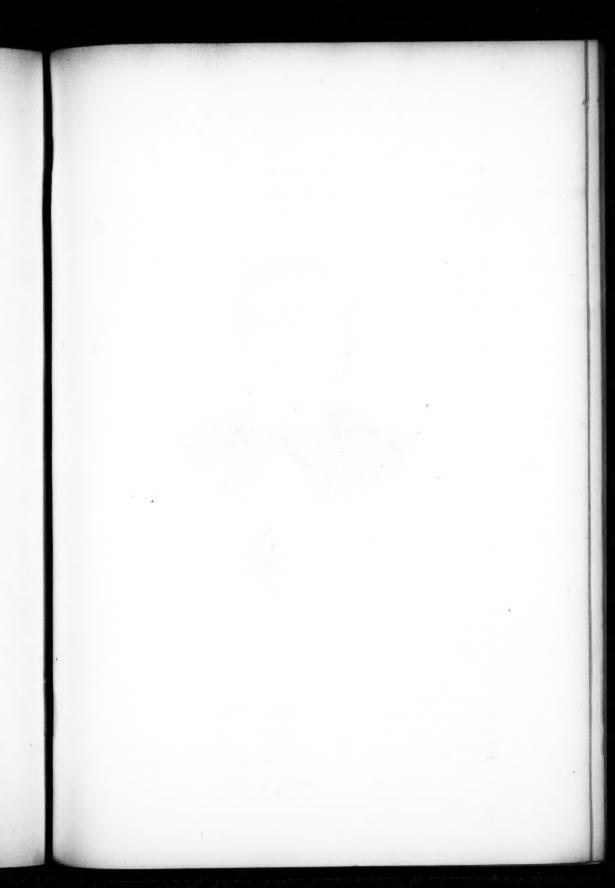
At a meeting of the National Flint Glass Manufacturers' association, held in Philadelphia in 1866, a resolution was passed requesting Mr. Lyon to represent the pressed glass business of the United States at the Paris exposition, to be held the following year. Such a compliment as this was of course very gratifying, and was cheerfully responded to. The firm sent a full exhibit of the fine and delicate ware they were making, and were awarded a diploma and bronze medal for superiority in pressed glassware. Medals were awarded to them at the Centennial exposition held in Philadelphia, Pennsylvania Institute fair and Maryland Institute.

When Mr. Lyon, fresh from the bank, commenced the business of glass-making, he knew nothing concerning it, and as he once told a gentleman in conversation "did not even know what glass was made of." But he brought a clear head and an active mind, and as he had no prejudices or preconceived notions to overcome, he went at a scientific and business study of the whole question, and soon marked out new and successful lines for himself. A majority of the glass men of the day had some wonderful formula, which they hugged close in secret guardianship and blind devotion, and which prevented their seeing better methods or making advanced steps in the business. Lyon had none of these drawbacks to overcome. He approached the new business in an inquiring and receptive mood, ready to try new suggestions, and determined to make use of all the appliances and expedients that modern

science could offer. He was soon led to make pressed glass a specialty, and the more he experimented in that direction, the more he was encouraged. His was the first house in the country to adopt that line of work, and it has remained in the very front rank of the business from that day to this. No house in America has a better reputation than this for the quality of its work. and some idea of the appreciation of the public can be found in the steady growth of the works. Tributes in support of that fact are not diffiult to discover. Deming Jarves, one of the earliest successful flint glass manufacturers in this country, in his work entitled, 'Reminiscences of Glass Making,' published in 1865, speaking of the pressed glass manufacture, says:

"America can claim the credit of great improvement in the needful machinery which has advanced the art to its present perfection. More than threequarters of the weekly melt is now worked into pressed glass, and it is estimated that upwards of two million dollars has been expended in the molds and machines now used in this particular branch of glass-making. This leaves Europe far behind us in this respect. With us there is active competition for excellence. It is conceded, however, that James B. Lyon & Co., of Pittsburgh, stand first. To such a degree of delicacy and fineness have they carried their mauufacture, that only experts in the trade can distinguish between their straw stem wines and other light and beautiful articles made in molds, and those blown by the most skilled workmen. When we consider the difference in the cost between pressed and blown ware, this rivalry in beauty of former with the latter becomes all the more important to the public, as it cheapens one of the necessaries of civilized life.

Great credit therefore is due this firm for their success in overcoming difficulties well understood by glass-makers, and doing away with the prejudice of the skilled blowers, who naturally were not inclined to put the new and more mechanical process of





Magazine of Western History

Alex Chambers

manufacturing glass on a par with the handicraft of the old. James B. Lyon & Co. also excel all other American firms in large ware for table services, as well as in the more delicate objects of use.

While Mr. Lyon has touched the business interests of Pittsburgh at many points, the making of glass has been his chief occupation, and in that he has won his great success. He is no mere follower of rules and precedents, but brings to bear upon the solution of each problem a mind naturally of an inventive turn, and a wide experience. He is recognized everywhere as one of the leading glass men of the country, and his judgment upon any question of the trade has the greatest weight. Personally, he is a courteous, cultured, and approachable gentleman, standing high in the honor and estimation of the public, and higher still among those who know him the best.

ALEXANDER CHAMBERS.

Among the men who have given Pittsburgh a high repute as a glass-manufacturing center, and especially among those who have aided in developing the industry and making it what it is, Alexander Chambers must be awarded a high and honorable place. He has departed from the scene of his labors, but his memory is held in grateful affection in many hearts, and perpetuated in the great establishment he founded. He was naturally equipped for a successful contest with circumstances, having, in his Scotch-Irish ancestry, a foundation of pluck, energy and courage of the most substantial kind. He was born in Ireland in 1810, and brought here when an infant, so that all his aspirations and

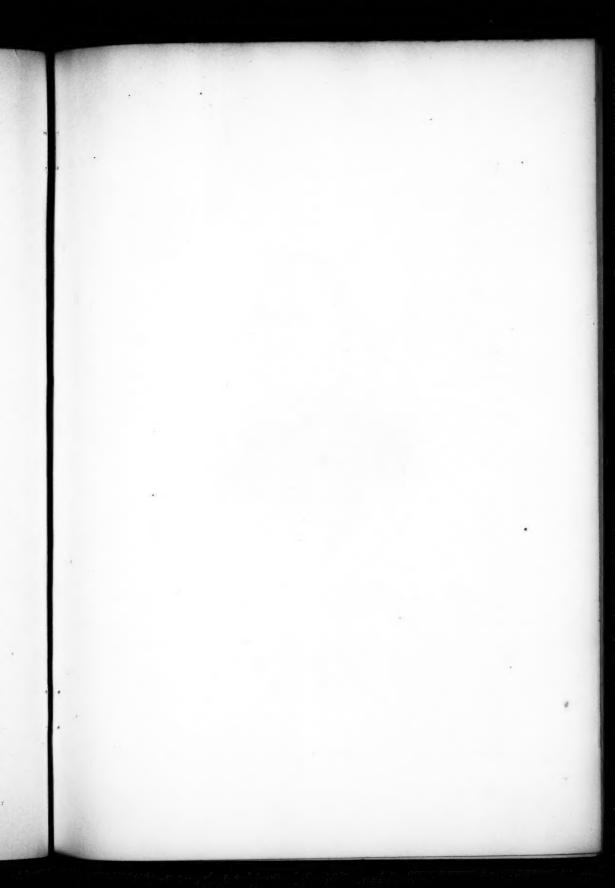
instincts were as thoroughly American as if he had found life on this soil. His father, James Chambers, settled in what was then Bayardstown, but is now a part of Pittsburgh, and in one of its most important and thickly settled regions. He was a useful citizen in his day and generation, filling for over twenty years the position of alderman from the fifth ward. The son Alexander was given a fair education for the day in the common schools of Pittsburgh, and at the proper time, and in accordance with the almost universal custom of the time, was set to learn a trade. That chosen for him was the glass business. He faithfully served his apprenticeship, working with his head as well as his hands, and making himself master of the business in all its branches, with a fair idea as to its possibilities. Therefore he was prepared, when starting for himself, to take such steps, and only such as were to the best advantage. His first venture was made in company with a brother, David H. Chambers, in They located in the old fifth ward, and were engaged in the manufacture of vials and green and black bottles. They remained in this locality, gradually extending their business and building up a trade until 1853, when they removed their works to what was then called South Pittsburgh, but is now a part of the city and known as the South Side. Here they continued in the manufacture of vials and bottles, and added window-glass thereto. The site occupied was the same yet held, where the establishment of A. & D. H. Chambers is located and has been for

over thirty years. When the two brothers commenced on the South Side they employed less than fifty men, but so greatly has the business grown that now five hundred are required. Mr. David H. Chambers died in 1862, but the business was continued by his brother without the addition of any new partners or change in management.

Alexander Chambers was one of the best known glassmen the country over, and was one of the leading spirits therein. His mind was active and always seeking out new avenues of development and improvement in the manufacture of glass. He was one of the first in the country to increase the sizes of window-glass, and he was very successful in his ventures in that direction. He was recognized as the leader in his lines of manufacture for many years. gave his chief thought and attention to the glass business, and allowed no other interests to divert him therefrom. That was while he was actively engaged in it, although in the later years of his life he gave it only a general oversight, and left it in charge of those who have so worthily conducted it since his death. He was financially and personally interested in a number of outside enterprises for the development and upbuilding of Pittsburgh, among them being the Exchange National bank, of which he was director, while he held stock in many of the other banks and insurance companies of Pittsburgh. He represented his home ward in the city council for a number of terms, and while there was noted for his good common sense and business prudence. He was one of the

pioneers on the South Side, and always took an active interest in anything relating to its material or moral improvement. He was a member of its borough government for a time, and one of the influential men therein. His heart was moved by any worthy or humane cause. During the late war for the Union cause, he was an earnest and practical friend to his country, generously equipping several companies, and aiding in all possible ways in his power.

The business and personal characteristics of Mr. Chambers are somewhat outlined in the above, but much more can be truthfully said concerning him. He was one of the most generoushearted men that could be anywhere found, and with him the instinct to give was followed by the act itself. He made no large donation in some public direction and then rested thereon, but his alms were continuous and did daily good in many directions. He could hear of no case of want or trouble without wishing to become one of the means of relief. A day did not pass that did not see some chance for generosity laid at his door, and to his high honor be it said, that no worthy applicant was ever sent away empty-handed. liberally to the church and to the organized forms of charity of Pittsburgh. He was noted for his steady industry and indomitable pluck, while his uprightness of character was recognized and acknowled by all. His word was all that any man required, and when that was once given it was sacred. He had, in a wonderful degree, the faculty of being fair and just to all men, and could fairly





Mohm

arbitrate on a case in which he had an interest, giving to all sides a hearing, and deciding against himself if the facts led to such conclusion. His mind was acute and active, suggesting methods in the manufacture of glass calculated to lessen the cost and improve the quality. He was essentially practical, and as all these traits were developed in early life, he had no trouble when starting in business for himself to secure all the backing he needed.

Mr. Chambers made several visits to Europe, and in other ways used the leisure of his latter years in recreation and travel that were not possible to him when in the cares of an active business He was in the possession of good health almost up to the close of his life, and the end came after only a few days of sickness. When his death-which occurred on March 28, 1875-was announced, the feeling of grief throughout Pittsburgh was universal, and he was lamented as one who had accomplished a large share of good in the world, and who had faithfully served his day and generation.

His impress on the glass business of Pittsburgh was of a lasting character, and the great manufacturing house he created serves as the most fitting monument of his memory. His place in the business world is filled by his son, James A. Chambers, who, in partnership with Mr. H. B. Patton, keeps the reputation of the house of A. & D. Chambers up to the high mark it so long ago acquired.

SAMUEL MCKEE.

A long, stirring and useful connection

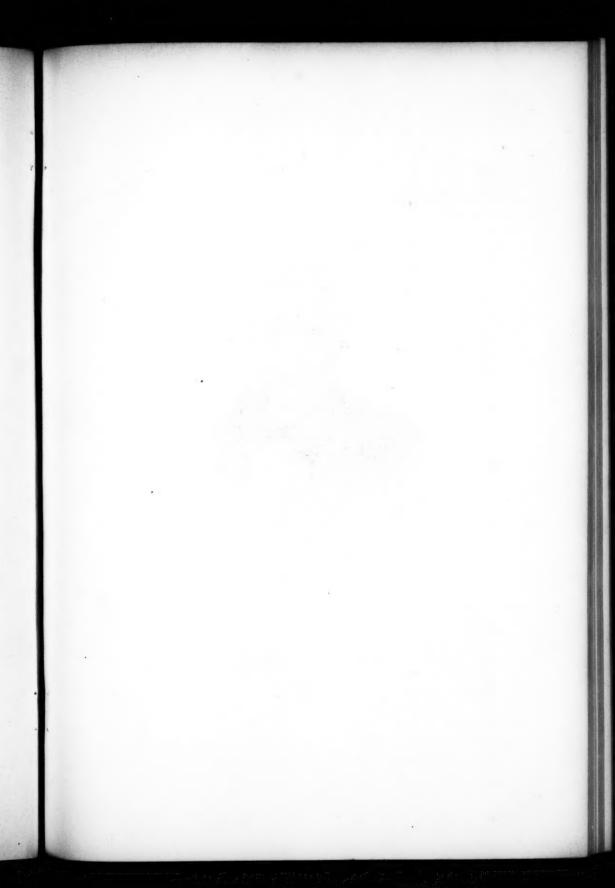
with the glass business of Pittsburgh, was that of Samuel McKee, who departed from his earthly labors in the summer of 1876. He was born in Pittsburgh, Pennsylvania, on March 29, 1808, and gave his early years to the learning of the business in which he achieved such success, and in the usual preparation of the American youth for the active duties of after life. He entered the glass business in 1834, when he assisted in the establishment in Pittsburgh of the firm of McKee, Salisbury & Company, the partners thereof being Samuel McKee, James Salisbury and James McKee. The business was continued in that form until 1836, when Samuel, James and Thomas McKee joined themselves in a partnership under the firm name of S. McKee & Company, and established the works on the present site, on Carson and Thirteenth streets. Thus settled. with his business gradually broadening, and with the highest success attending his efforts, Mr. McKee remained until the time of his death. From the first he made a specialty of window glass, and in course of time added that of bottles also, and was counted one of the leading spirits in those departments of the trade. He was a practical man, and understood the business from the foundations up. He learned it direct from the famous Germans who came across the water and to Pittsburgh early in the century, and taught the new line of labor to a section that had not known it before. His father-in-law, Mr. Charles Ihmsen, was one of the first glass-makers of the country, and Mr. McKee was enabled both by opportunity and application to

know as much about the business as any man in the land. He was universally recognized as one of the pioneers of glass, being among the men who cut a path through which this great industry has been carried to such a successful result in Pittsburgh.

Mr. McKee was interested in other Pittsburgh enterprises, although he made them secondary to the special occupation of his life. He was connected with the Mechanics' bank, and also the Merchants' and Manufacturers' before either had changed their form and come in under the provisions of the National banking act. He was one of the leading spirits in building the Pittsburgh & Birmingham bridge, one of the great links by which these two communities are held together as one. He was also interested in the creation of the Monongahela water works, giving to the project a large measure of his good judgment, experience and financial skill. He was for years connected with the borough government of Birmingham before the unification of its interests with those of Pittsburgh, and held the position of burgess. He was a devoted and generous friend to the various charitable institutions of the community in which he dwelt, and many were the quiet deeds of good that he found time to do in the course of his busy life. He was at one time a captain in the State Guards, and although he was promoted to a colonelcy before leaving the service, the former title attached to him and he was known as Captain McKee to the end of his days.

Mr. McKee's whole life was charactized by an unflinching integrity of purpose and action, and to this and to his remarkable business qualifications was due his great success. Notwithstanding his close attention to business, he found time to indulge a fine taste for literature. and there were few men in Pittsburgh or elsewhere better read in some directions than he. He was domestic in his tastes. fond of home life, and true and honesthearted in every relation of life. He was respected by the entire community, and in his long and busy career no one ever questioned his personal integrity or commercial honor. His business led him into relationship with men and firms the country over, and with them all his word was taken at its full meaning, and the deed was found always to be as good as the word.

In the latter years of his life, Mr. McKee retired from active business pursuits, although he was able to mingle freely with the world in a social way, and take the benefit of the possessions with which his earlier labors endowed With a fine presence and a courtly manner, he gave pleasure to all who met him. In the final attack through which his life was ended, he was confined to his home for only a few days, and was not considered in danger until the evening preceding his demise. On Monday morning, July 3, 1876, the final summons came, and found him prepared to meet it. His death was a surprise and a shock to the community, and the universal feeling was that a good and useful man had gone to his reward.





Jonnes Bryce

JAMES BRYCE.

There yet remains in active business in Pittsburgh a glass manufacturer who has given many years to his chosen branch of labor, and who first saw the light of day nearly three quarters of a century ago. I refer to Mr. James Bryce, of the old and well-known firm of Bryce Brothers. His life has been one of upright usefulness and unquestioned success, and some account thereof cannot but be of interest in this connection. He was born in the southwest of Scotland, in the stewardry of Kircudbright, on November 5, 1812, and was brought to this country by his father in 1818. They resided in Philadelphia for nearly two years, and late in 1819 moved to Pittsburgh, where Mr. Bryce has since resided. Three weeks were consumed in the journey from Philadelphia to Pittsburgh, a distance now traversed in a single night. Their means of conveyance was an old-style conestoga wagon, in which so many emigrants of that day found their way to the new homes of the west. Halts were made at the wayside inns for the rest of the night; and it is needless to say that to the boy of seven the trip was one of adventure, long to be remembered in all its details. Mr. Bryce says that forty years afterward he went out of his way in the leisure of a vacation to pass over a portion of this same road, and that it all came back to him as in a dream, marking the wonderful changes that less than half a century had accomplished.

Soon after reaching Pittsburgh, the boy James was placed at a regular ap-

well, Page & Bakewell, where the Baltimore & Ohio depot now stands. The establishment with which he was connected was at that time the only one of the kind west of Boston, except one small concern at Wellsburgh that did not run more than half the time. Messrs. Bakewell, Page & Bakewell were not always in operation, as the trade was not always one of certainty in those days, and sometimes it would be difficult to find a market for their wares. boat would be loaded with goods and run down the river, where its cargo would be traded at the various settlements for such articles as the people had for sale, which would be brought back to Pittsburgh and disposed of. Sometimes the wagons that had brought merchandise from Baltimore would be loaded with glassware on their return trips; but little was sent this way, as the freight charges were such that there was little or no money in it. These works then contained one furnace, and employed eight blowers, its specialty being flint glass, in tableware, etc.

James Bryce went to work at ten years of age, and commencing at the lowest round steadily pursued his way to the top. He learned the business thoroughly, mastering it in all its details. He was soon advanced to the position of blower, and on the expiration of his term of service began work as a journeyman. This occupation he steadily pursued for eighteen years. The "hard times" of 1840, following the panic of 1837, shut down the glass works, when Mr. Bryce made a venture prenticeship in the glass works of Bake- in the grocery business, locating on

Liberty street. After four years' experience, in which he demonstrated that while there was plenty of labor and risk in that line of trade there was little money, he determined to go back to glass, in which he had been raised, and to remain in it thereafter. This purpose was carried into effect in 1845, the year of the great fire, and he went into the employ of Mulvany & Ledlie, who were then making glass on the South Side. In 1850 Mr. Bryce made the first real business start of his life. It was a time when cooperative theories were prevalent the country over, and many enterprises on that plan were being inaugurated. A number of men, among whom Mr. Bryce was the most prominent and active, formed a company for the manufacture of glass, under the name of Bryce, McKee & Co., each man therein conducting the branch with which he was best acquainted. Their works were located in what was then Birmingham, but is now the South Side and a part of Pittsburgh, on the south side of the Monongahela river, and where the large and flourishing establishment of Bryce Brothers is now located, the plant having remained there continuously from that day to this. Only two of the original owners are now left, Mr. Bryce and his brother, Robert D. Bryce. The various changes of firm name and ownership that have taken place since 1850 are as follows: Bryce, McKee & Co.; Bryce, Richards & Co.; Bryce, Walker & Co., and finally the present one of Bryce Brothers, the two gentlemen of that name having purchased Mr. Walker's interest at the

time of the latter's death. The works are now conducted by the two brothers, assisted by four sons and one grandson, all of whom have been thoroughly and carefully trained to the business. The mantle of the Bryce brothers will fall on worthy and capable shoulders when they are gone.

This establishment is the oldest existing glass house in Pittsburgh, and has been a grand training school for others. Out of it five other firms have drawn their life, being founded by men who had learned their business under the Messrs. Bryce. When it was established it employed from fifty to seventy-five men, but so great has been its growth and so widely has its business expanded that now it employs over three hundred. Mr. James Bryce has been the active head of it from the beginning, and all its dealings have partaken of his honesty and native good sense and business prudence. Ever since his venture in the grocery business, as recorded above, when he decided to stick to the occupation to which he was trained, he has adhered to that resolution, with the best possible financial results to himself. His theory of business life, as early formed and strictly lived up to, was that a safe, steady, reliable business, conducted with a due regard to the rights of everybody concerned, was the best investment in the long-run. His success has proved the truth of this theory. While this course of strict personal attention to business has been his rule, it has not prevented his taking part in outside matters when he thought he could be of public service in doing so. He has had





Thomas Mekee

investments in a number of enterprises. which he has retained until the venture was on its feet, and then withdrawn, leaving others to reap the benefits of later years. Mr. Bryce has kept out of public and political life because he has had no taste in that direction, although he did for some time hold the position of burgess of Birmingham, not because he sought the honors of public station but to aid in the production of results that he thought were for the general good. During the war he also took a part in political affairs, as his heart was in the Union cause, and he desired to do all in his power for the good of his country.

Mr. Bryce has been connected for over fifty years with the Presbyterian church, and worships in the United Presbyterian church of Pittsburgh, of which Rev. W. J. Reid is pastor. Mr. Bryce has been an elder in that organization for a number of years, and still serves in that position. He is a generous contributor to that and to other worthy objects, and is in every way a useful man to the community in which he dwells.

In 1876 Mr. Bryce paid a visit to his old home in Scotland, and the event was one of the most pleasant of his long and busy life. He had left it when a boy of six, with all the future before him, and was brought to this far-away land to work out his own fortune and to make of himself whatever the powers within him and the life around him would allow. He returned, a man of sixty-four, rich in worldly goods, and one of the substantial business men of a great and growing

industrial mart. The marvelous changes that had taken place within that period of time were well illustrated by the time consumed in the first journey as against that of the last. On the first occasion, as mentioned above, three weeks had been consumed in the journey from Philadelphia alone, saying nothing of the long sail across the ocean. On his return to Scotland the trip occupied but eleven days, which was only about one-third of the time consumed on the first journey from Philadelphia.

Mr. Bryce, while keeping a general oversight of matters about the establishment of which he is the head, allows much of its work and responsibility to fall upon the younger shoulders about him. He feels that his life work is practically done, and he is calmly waiting the summons whenever it shall come. He has lived a worthy life, and is prepared to answer willingly whenever he shall be called.

THOMAS MCKEE.

Thomas McKee was born in Carlisle Pennsylvania, September 18, 1800, and came with his parents, when a small child, to Pittsburgh, where his father died soon after their arrival. His mother, a woman possessing excellent sense, great energy and a devout Christian, reared her family so well that all the children led useful and honorable lives. Well might it be said of her, "Her children rise up and call her blessed."

There are but few facts obtainable as to his school life and relative rank as a pupil. But considering his early life, in connection with his later years, there is no reason to doubt that the man of accurate information, liberal ideas and thorough integrity, was an industrious, thoughtful and honest boy and youth.

When twenty-six years of age he married Hetty Zillhart, who long survived him (dying in 1884). She was endowed with uncommon qualities of heart and mind; her pure and childlike faith was a sermon in itself. Soon after his marriage, Thomas McKee, with his brothers, Samuel and James, under the firm name of S. McKee & Company, engaged in the manufacture of windowglass, the factories being located on the south side of the city of Pittsburgh.

This was one of the earliest firms that undertook the manufacture of glass in Pittsburgh, and when we consider that the factories were located on lands that had never known any worker but the farmer, it is evident that such a project was not without hazards unknown to more recent enterprises.

Drive back the clouds of smoke from these and other factories that now encanopy the south side of the city of Pittsburgh, and level to the earth and remove the many structures that now throb with life and give forth an incessant hum of industry, and put in their stead those buildings of half a century ago, among the green fields, and you will then have an idea of the far-reaching results of these early ventures. Only the enterprise and untiring energy of such men could, in the face of the great difficulties, sure to be encountered, establish firmly such industries, then here untried.

But not alone did their courage and achievement make this one particular factory or these particular branches of manufacturing flourish; for the spirit manifested exerted its influence in other directions, so that in the "fullness of time" the green fields are forgotten, save by those crowned with many years, and the South Side and its surrounding circles have given to Pittsburgh the name of one of the greatest manufacturing centres of the world.

Mr. McKee was also prominently connected with many of the corporations of Pittsburgh, as projector, promoter and officer, and to his foresight and interest much of their stability is due. In fact all of the enterprises of this kind with which he was identified are to-day of the most substantial and prominent character.

Such was his great administrative ability that, although he had his own extensive manufacturing interests to look after, he also found time to attend to the demands of these public enterprises. At the time of his death, and for many years previous, he was president of the Deposit Company of Birmingham, now the First National bank. His public spirit carried him into even more public positions than those noted, and he served the community for many years as councilman, school director, treasurer of Allegheny county, etc.; was also a member of the boards of various state institutions.

He was a prominent and influential Whig and Republican all his life, and in the politics of the state he was as potential as he was in public and private life, and this without any sacrifice of character. He was an ardent patriot, doing all in his power to aid those who were engaged in putting down the rebellion.

Mr. McKee died in 1864, and was not permitted to see the end of the war, but he never for a moment lost faith in the final triumph of the Union cause.

While still connected with his brothers in the manufacture of window-glass, he started and established his sons, Frederick, James, William, Sellers and Stewart, in the manufacture of flint glass, under the name and style of F. & J. McKee, now McKee & Brothers, both of which concerns, founded so many years ago, are still in operation.

But what has been said of the enterprise, foresight, integrity and public spirit of this good man is not the half. It was upon the side that the public never sees that he shone most brightly. During his life he was greatly interested in the education of the young and gave freely of his time and substance to the support and encouragement of educational institutions at home and elsewhere as well. He was a most generous man, whose benefactions reached everywhere without ostentation or parade.

Though the requirements of his public and business enterprises were great, he was never so engaged but that he was always ready to answer all the calls of the poor and needy, or indeed of those who required any aid in his power to give. An ardent abolitionist from his youth up, the poor black man in his midnight journey to freedom always found in him a firm, courageous and staunch friend.

As a communicant and officer of the Lutheran church, Thomas McKee was known as an humble and sincere Christian, without bigotry or bitterness, and extending the utmost freedom of creed and belief to others.

In social and domestic relations, he was well nigh an ideal man, and the sweetness, cordiality and dignity of his character were never seen to better advantage than in the home circle. Happy in the society of his friends, as a husband and father he had the fine art of making a delightful home, where the utmost affection, tenderness and real consideration reigned supreme. His hospitality was proverbial.

In person he was fine-looking, with a fair complexion, his manners easy and gentleman-like, simple and pleasant, and his conversation instructive and entertaining.

"In his home dwelt order, prudence and plenty. There was no waste and no stint. He was open-handed, just and generous; his brow was serene and open, for he loved men and was himself a manly and gentle man."

HENRY JAMES SEYMOUR.

THE BURIAL OF DE SOTO.

** Requiem acturnam

Dona es, Domine!"

Like incense from the altar,
Floating o'er the water,
So slow it seems to falter,
Fade and pass away.

Now a rough-hewn vessel, Burdened with a band, Brave yet stricken-hearted For that one departed, Slow and still is started From the foot-worn sand.

Silently they circle
Round the lifeless form;
On the bank in crowds,
In the midnight shrouds,
Under angry clouds,
Wolves foretell the storm.

Like a feeble protest
Come the words of prayer:
"Save our noble master—
Wilt Thou drive us faster
Onward to disaster,
Onward to despair?"

Cold in death, De Soto Kissed the river's brine, Like a knightly lover; Waves he helped discover, Forming now the cover Of his earthly shrine.

And as I am sitting,
Dreaming of that day,
The river still is praying
In its rippled playing,
"Requiem," 'tis saying,
"Dona eo, Domine!"

-CHARLES K. BOLTON.

Cleveland, O.

THE SIEGE OF FORT PITT.

FORT DUQUESNE was demolished and abandoned by the French on the night of the twenty-fourth of November, 1758. The English army, under General Forbes, entered the smoking ruins at dusk the next day. The latter at once erected a work on the spot which they called Fort Pitt. The locality was named Pittsburgh. It took this name from the start, as we find Post referring to it by this name in his journal within a week after the place had fallen into the hands of the English.* The original Fort Pitt was but a temporary shelter. The next year, however, General Stanwix built a more formidable and permanent fortification upon the same site. This latter work is said to have cost the British government the sum of £,60,000. This is quite incredible. Such a sum at that time would represent no less than half a million dollars now; and we know from the description of the fort as it has been handed down to us, as well as from other circumstances of the case, that no military work costing any such a sum ever stood at the forks of the Ohio. Onetenth of this amount is perhaps nearer the figure, and even that seems large for the kind of work that we know was built upon the spot.

The western Indians were far from satisfied with the result of the French

war and the treaty of Paris. Pontiac, the great chief of the Ottawas, set about forming an Indian confederacy against the English. He had conceived a great contempt for the British soldiery, and believed that by a united effort the English could be driven east of the Alleghanies, if not expelled entirely from the continent. He was shrewd, eloquent and brave, and by the spring of 1763 he had succeeded in uniting no less than eighteen powerful tribes against the English. His proceedings were conducted with the most profound secrecy, and with three exceptions-Detroit, Fort Pitt and Niagara-all the English posts on the frontier fell into the hands of the Indians with little or no resistance. Vet this dreadful uprising of the savages had not come altogether unheralded, if we are to believe the ancient chronicler. At Detroit and through the surrounding country, in July, 1762, it rained "a sulphureous water" of the color and consistency of ink, and which, being collected in bottles, "answered every purpose of that useful liquid."†

^{† &#}x27;Three Years' Travels,' etc., by Captain Jonathan Carver, page 96. "Soon after." he says, "the Indian wars already spoken of broke out in these parts. I mean not to say that this incident was ominous of them, notwithstanding it is well known that innumerable well attested instances of extraordinary phenomena, happening before extraordinary events, have been recorded in almost every age by historians of veracity; I only relate the circumstance as a fact, of which I was informed by many persons of undoubted probity, and leave my readers to draw their own conclusions from it." I may add that Carver's visit to Detroit was in the summer of 1768.

^{*&}quot;We came within eight miles of Pittsburgh, where we lodged on a hill, in the open air."—Post's Journal, December 2, 1758.

Captain Simeon Ecuyer, a gallant Swiss, was in charge at Fort Pitt. In the beginning of May, 1763, he wrote to Colonel Bouquet, saying that Major Gladwyn, at Detroit, had sent him notice that Fort Pitt was surrounded by rascally Indians. Complaint was specially made of the Delawares and Shawanese. "It is this canaille," writes Gladwyn, "who stir up the rest to mischief." In the course of the month, the conduct of the Indians in the vicinity of the fort became suspicious. On the evening of the twenty-seventh, Ecuyer was informed by Mr. McKee that the Mingoes and Delawares were in motion, and that they had sold skins to the value of £300, with which they had purchased a large supply of powder and lead. On the twenty-eighth, McKee was sent to the Indian towns to gather information, but he found them entirely abandoned. On the twenty-ninth, just as he was finishing his letter—the last letter that he was able to get through the lines for more than two months-Ecuver says that three men who had been working near Clapham's, in the neighborhood of the fort, had just got in with the sad news that the Indians had "murdered Clapham and everybody in his house." I On the heels of this bad news came in such traders as had escaped the violence of the savages, with reports of the murder and pillage of many of their brethren.

Ecuyer at once set to work to put the fort in the best possible state of defence.

The families living about the fort were

gathered within its walls, and the houses outside were destroyed. A fire-engine was constructed. A hospital was fitted up under the draw-bridge. Provisions were collected, and everybody capable of handling a musket was armed for the conflict. Ecuyer's force consisted of three hundred and thirty men-soldiers, traders and backwoodsmen. There were in the fort also about one hundred women and a still greater number of children. "We have plenty of provisions," writes one from the fort, "and the fort is in such a good posture of defence, that, with God's assistance, we can defend it against a thousand Indians."

For some days after actual hostilities began, the Indians contented themselves with skulking in the neighborhood, and shooting any person who might be rash enough to expose himself, and in this way several persons were slain. In the afternoon of the twenty-third of June. a general fire was opened on the fort from all sides, and two men were killed. A discharge of large guns among the savages put a stop to the assault, but a desultory firing was kept up all night. The next morning several Indians approached the fort, and one of them named Turtle Heart, addressed the garrison in terms of the greatest friendliness. He informed them that six great nations of Indians had taken up the hatchet. "You must leave this fort," said he, "with all your women and children, and go down to the English settlements, where you will be safe. There are many bad Indians already here," he continued, "but we will protect you from them." The purpose of

[‡] Letter of Captain Ecuyer to Colonel Bouquet, May 29, 1763.

this cajollery was too evident; and Captain Ecuyer replied: "We have plenty of provisions, and are able to keep the fort against all the nations of Indians that may dare to attack it. We are very well off in this place, and mean to stay here." There was now a lull of some weeks in the proceedings, though the fort was still watched by the enemy with the utmost vigilance, and all communication with the outside world was entirely cut off. Several messengers who had attempted to pass through were killed or compelled to return wounded. It was not until towards the close of July that any serious attempt was again made upon the fort. On the twenty-sixth of that month, a delegation of chiefs came to the fort with a flag, and were admitted. They made a long recital of grievances, represented the dangers to which the English were exposed, and again urged them to depart. "If you leave this place immediately," said they, "and go home to your wives and children, no harm will come of it; but if you stay, you must blame yourselves alone for what may happen." To this Ecuyer replied:

I have warriors, provisions, and ammunition, to defend the fort three years against all the Indians in the woods; and we shall never abandon it as long as a white man lives in America. Moreover, I tell you that if any of you appear again about this fort, I will throw bomb shells which will burst and blow you to atoms, and fire cannon among you loaded with a whole bag full of bullets. Therefore take care, for I don't want to hurt you.

This bravado on the part of Ecuyer was all well enough, as a fair offset to the bluster of the Indians; but the chiefs retired from the fort very much displeased. That night a fierce attack was

made on the fort. The savages secreted themselves in burrows which they made under the banks of the river, in which they were entirely protected from the fire of the garrison. From their hidingplaces, they kept up a constant fire for several days. They also discharged burning arrows, in hopes of setting the buildings on fire; but in this they failed. Their incessant yelling filled the women and children with terror. Their fire was not very damaging. No one was killed; seven men were wounded, among them Ecuyer himself, who received a wound in the leg from an arrow. On the side of the Indians were twenty killed and wounded to the certain knowledge of Ecuyer, besides, as he believed, a number whom he could not see. Ecuver's men behaved well. "I am fortunate to have the honor of commanding such brave men," he said. The garrison was safe from the attack; but if the siege should be long continued, starvation must compel them to capitulate at last, or attempt the desperate chance of cutting their way through the savage host. It was impossible to communicate with the outer world, and the brave officer must at times have felt alarm at his isolated position and the number and pertinacity of his foes.

But succor, unknown to him, was on its way. Colonel Henry Bouquet, a brave but cold-blooded* Swiss officer in

^{*} See Bouquet's letters to Sir Jeffrey Amherst, in which he proposes to inoculate the Indians with small-pox by means of blankets, taking "good care not to get the disease himself," and wishing he could "make use of the Spanish method, to hunt them with English dogs." The letters are printed in Parkman's 'Conspiracy of Pontiac,' Chapter xix.

command of a small army, was moving slowly forwards to the relief of the beleaguered garrison. The whole frontier had been thrown into a state of confusion and alarm. The savage marauders had swept over the country almost unchecked, marking their path with slaughter and fire. July 13, Bouquet writes: "The list of the people known to be killed increases very fast." The terrified survivors crowded into the small frontier towns, where they suffered greatly from hunger and exposure.

Bouquet set out on his march from Carlisle with a force of about five hundred men, consisting mainly of the Royal Highlanders, Montgomery's Highlanders, and a company of Royal Americans. The Highlanders had just landed from the West Indies, where they had suffered severely from the climate, and were in a very enfeebled condition. Sixty of them were so ill that they were not able to march, and were taken along in wagons. While they could not be of service in the field, it was thought they might perform garrison duty. On the twenty-fifth of July Bouquet reached Fort Bedford. On the second of August he arrived at Fort Ligonier. This place was about fifty-five miles from Fort Pitt. It had been repeatedly assailed by the savages within the last few weeks, but the garrison, with the aid of the settlers who had fled to it for protection, had been able to hold the place. Bouquet had been very anxious about Fort Ligonier, as upon its safety depended largely the success of his expedition. Some Indians had been hanging about

the fort, but upon the approach of Bouquet they disappeared in the forest.

Bouquet determined to lighten his march by leaving here his oxen and wagons, and push forward for Fort Pitt. On the fourth of August he left Fort Ligonier, and marched about twelve miles, when he encamped for the night. The next day he resumed his march, and in the early afternoon he reached a point within half a mile of Bushy run, where he intended to halt until evening. He had marched seventeen miles. The day had been extremely hot, and the weary and thirsty men were looking forward eagerly to the much needed rest and refreshment which they had been promised. All at once the horrid warwhoop and the crack of numerous rifles in front startled the unsuspecting column.

The silence at Fort Pitt on the fifth day of August was ominous. Not an Indian was to be seen. No sound broke the stillness of the air. Ecuyer, closely beleagured for weeks, had received no intelligence of Bouquet's march, and was at a loss to account for the abandonment of the siege. He had no notion, however, that it boded any good to the garrison, and so was not elated or thrown off his guard. He looked for the storm to burst upon him again with redoubled fury.

The savages had indeed raised the siege, at least for the time being, and had gone off to intercept the march of Bouquet. They were no doubt animated by the recollection of Braddock's defeat a few years before, and anticipated as

certain a victory now. Bouquet was marching over the road made by General Forbes in 1758. Although he had left at Fort Ligonier all the *impedimenta* possible, he still had with him a train of three hundred and forty pack horses laden with flour and other supplies for Fort Pitt. By a little after noon of the fifth of August, as we have seen, he had reached a point within half a mile of Bushy run, and within twenty-six miles of the place of his destination.

At once upon the opening of the firing on his front, Bouquet pushed forward reinforcements. The Indians kept themselves well hidden behind the trees, and did not expose themselves to the fire of the soldiers. The troops were falling Only a dozen miles thick and fast. away the bones of Braddock's unfortunate men were moldering into dust, and apprehensions of a similar fate chilled the blood of Bouquet's bravest. The soldiers made frequent charges upon the enemy, but the latter fled into the woods and eluded the glittering bayonet. As soon as the troops fell back to their positions, the Indians again encircled them with their deadly fire. Hour after hour elapsed, and the unequal contest went on. The fierce yells of the Indians and the cries of the wounded mingled with the continuous rattle of arms. The pack horses were unloaded, and a rampart was formed of the sacks of flour, behind which were placed the wounded. To the oppressive heat of the day, wounds and alarm, were added the tortures of thirst. The hillsides around them were bursting with springs of delicious water, but the savages

guarded them closely and cut off all access to them. Night at length enveloped the scene, and put a temporary stop to the fierce conflict. More than sixty men had been killed and wounded, among them several officers. wearied soldiers could get but little rest or sleep. All around them were the blood-thirsty savages, hemming them in, and only waiting for day to renew the slaughter. The frightful war-whoop, and the report of the murderous rifle. whenever the sleepless red man perceived in the gloom the object of his hate, rang through the forest, and kept the panting host in a state of alarm and wakefulness. If the Indians counted upon an easy victory, they reckoned falsely. Bouquet was a different man from Braddock. He understood thoroughly the Indian character, and was as brave as the bravest. That night, by the dim and half-hidden light, he wrote to Sir Jeffrey Amherst an account of the day's conflict. How he got or proposed to get the letter through the cordon of savages, we do not know. "Whatever our fate may be," he wrote, "I thought it necessary to give your excellency this early information, that you may at all events take such measures as you think proper with the Provinces. for their own safety and effectual relief of Fort Pitt, as in case of another engagement, I fear insurmountable difficulties in protecting and transporting our provisions, being already so much weakened by the losses of this day in men and horses, besides the additional necessity of carrying the wounded, whose situation is truly deplorable."

With the early dawn the unequal combat was resumed. The savages resorted to the same tactics as on the day before. "They would never stand their ground when attacked," says Parkman, "but vanish at the first gleam of the leveled bayonet, only to appear again the moment the danger was past." Thus the troops, wearied with the toils of the preceding day, maddened with thirst, and unable to fix the object of attack, were discouraged and almost in despair. Bouquet perceived that some different method must be taken. He believed that if he could but get the Indians to stand their ground he could defeat them. It was now pointed out to him where, by a certain movement, a large body of the boldest of the savages could be taken at advantage. Accordingly he ordered two companies of Highlanders to retire from the line and fall back within the circle. The wings then extended themselves across the intervening space, as if to cover the apparent retreat. The savages, thinking that a retreat was really taking place, and now sure of their prey, rushed upon the weakened segment with shouts and yells, but were stubbornly resisted. At the same moment the two companies of Highlanders, under Major Campbell, who, for that purpose, had been sent around the hill unobserved by the enemy, fell furiously upon their flank. "They resolutely returned the fire," says Bouquet, "but could not stand the irresistible shock of our men, who, rushing in among them, killed many of them and put the rest to flight." They were pursued by the infuriated troops, and completely broken up and chased away.*

No time was lost. The wounded were at once carried forward to Bushv run. and their necessities as carefully attended to as possible. Here, however, ten of the wounded died. Many of the pack horses having broken away during the battle, Bouquet was compelled to destroy a large part of the supplies which he was taking to the fort. At Bushy run the Indians again attempted an attack, but they were soon dispersed. Except a few scattered shots along the way afterward, Bouquet was no further molested by them. After the fight, sixty Indian corpses were counted upon the ground. Bouquet's loss had been one hundred and fifteen men in killed, wounded and missing. After night the Indians returned to the battle field, and scalped the dead. The next day the screeching multitude marched past Fort Pitt, shaking the gory trophies at the walls.†

After resting and recruiting their strength at Bushy run, the army set forward again, and on the tenth of August arrived at Fort Pitt. We may easily conceive the rejoicing that their arrival must have caused among the people who had been so long confined to the narrow limits of their walls, and had no doubt nearly given themselves up for lost.

T. J. CHAPMAN.

^{*} The scene of Bouquet's hard won victory is on what is called the Harrison City road, about two miles north of Penn Station, on the Pennsylvania railroad. The one hundred and twentieth anniversary of the battle was celebrated on the ground with suitable ceremonies on the sixth of August, 1883. † Colonel Henry Bouquet and his Campaigns. By Rev. Cyrus Cort. Page 43.

CHICAGO.

The founding of a great city has ever been considered a remarkable event—one worthy of a prominent place in the world's history. The bringing of a vast population within the circuit of a few miles is a result arising from causes concerning which the mind of man naturally seeks an explanation. These causes are generally discovered to be personal efforts wisely directed, with nature as a most generous assistant.

The site of the city of Chicago is exactly in that part of empire along which moves the ceaseless tide of travel and commerce, eastward and westward, around the earth. In passing from the great lakes to the Mississippi, the aboriginal people of the west were forced, as it were, into this line to a considerable extent. And the first white man who looked out upon the broad expanse of Lake Michigan-who gazed with rapture upon the boundless prairies beyond it-had he but continued his journey to the mighty river farther on, would doubtless on his return have made the Chicago portage from the Desplaines to the stream which now drains the western metropolis.

Not a decade and a half had passed after the landing of the Pilgrims upon Plymouth rock, when that indomitable explorer, John Nicolet—sent by Samuel Champlain from Quebec as government agent to some wild western tribes, to

promote peace and pave the way for opening up a profitable trade in fursfirst set foot upon the soil of the great west. His perseverance and heroic bravery will ever be commended. He visited the Hurons, upon Georgian bay, and with seven of them struck boldly into wilds to the northward and westward, where never before had been civilized man. He paddled his birch-bark canoe along the eastern and northern shores of Lake Huron, and finally entered the mouth of Fox river at the head of Green bay. It was not until he and his swarthy Hurons had urged their frail canoes six days up that stream that his westward progress was stayed. It was the first exploration of the extensive country, of which Chicago is now the chief city.

As yet, the red man reigned supreme over all this region. From the Alleghanies on the east to the far, far west; from the great lakes on the north to the Ohio river and beyond it—only one who could recount what he had seen in a civilized tongue had beheld any of its wonders or held converse with any of its people. The Mascoutins, a tribe of savages which the French upon the St. Lawrence had heard of on account of the wars of the former with eastern nations, Nicolet visited in one of their villages. And the Illinois proper, if he did not see, he gained some knowledge

of. So the inhabitants who, as far as it has been learned, first claimed at least a nominal possession of what is now the site of Chicago, became better known to the civilized world.

It was nearly forty years subsequent to the visit of Nicolet before the French king extended his possessions to the upper lakes and beyond, which, when done, placed the Chicago river and portage on the very confines, to the southwestward of New France. Meanwhile explorations had continued to the northward. During the autumn of 1641 two Tesuit missionaries visited the Sault de Ste. Marie, where they harangued two thousand Algonquins. In 1650 two fur-traders passed the winter on the shores of Lake Superior, where they heard of the ferocious Sioux and of the great river upon which they dwelt. Thus a knowledge of the Mississippi again began to dawn upon the European world; for its discovery by De Soto had well nigh been forgotten. Then followed the attempt of Father René Mesnard, in 1660, to found a mission on the same shores visited by the two traders; but he perished in the wilderness. However, other efforts soon after made were more successful, and four missions, by the year 1671, had been founded in the northern and eastern parts of the present state of Wisconsin.

Now, in a most formal manner, France by her trusted agent, Daumont de Saint Lusson, at a large gathering of Indian tribes at the Sault de Ste. Marie, announced that this whole region was henceforth to belong to that power. With the full consent of the savages,

they were all placed under the protection of the French king. It was thus that not only the "Sault," but all the other countries were brought under French domination-Lakes Huron and Superior, the Island of Manitoulin, and all countries, rivers, lakes and streams contiguous and adjacent thereunto, as well as those which had been discovered, as those which might be discovered thereafter, in all their length and breadth, bounded on the one side by the seas of the north and of the west, and on the other by the South sea. So that now, although there were not present any of the Illinois Indians proper, the whole Chicago country became a portion of the territory of New France, and so continued for seventy years.

But the Mississippi had not yet been visited by a Frenchman-no fur-trader, no missionary, no white man had as yet paddled a canoe upon its upper waters. In the year 1645 was born in Quebec Louis Joliet, the son of a wagon-maker in the service of the Company of the Hundred Associates, then owners of He was educated by the Canada. Jesuits, and when still very young resolved to be a priest. He subsequently changed his mind and turned fur-trader. He was afterward sent to explore the copper-mines of Lake Superior. was with Saint-Lusson at the "Sault" when, in 1671, France took possession of the west. Having been appointed by the governor of New France to go to the country of the Mascoutins to discover the South sea "and the great river they call the Mississippi, which is supposed to discharge itself into the sea of

California," Joliet set out in the early spring of 1673, with five Frenchmen from Quebec, upon his mission. Upon the north side of the Straits of Mackinaw he found Father James Marquette laboring among the Chippewas as a missionary. Marquette joined the expedition, and Joliet again started upon his tour of exploration. On the seventeenth of June, they entered from the Wisconsin upon the broad bosom of the Mississippi, "with a joy," says Marquette, "that I cannot express." After dropping a long distance down the river, the explorers returned by way of the Illinois and the Chicago portage and river to Green bay, where Marquette remained to recruit his wasted energies while Ioliet continued homeward.

"I had escaped every peril from the Indians," wrote Joliet to Frontenac, "I had passed forty-two rapids, and was on the point of disembarking, full of joy at the success of so long and difficult an enterprise, when my canoe capsized, after all the danger seemed over. I lost two men and my box of papers, within sight of the first French settlements, which I had left almost two years before." "I send you," wrote Count Frontenac to Minister Colbert, concerning the deplorable accident met with by Joliet, the map he has made of it (the country explored), and the observations he has been able to recollect; as he has lost all his minutes and journals in the shipwreck suffered within sight of Montreal, where, after having completed a voyage of twelve hundred leagues, he was near being drowned." "He left with the Fathers of Sault Ste. Marie," continues

the count, "copies of his journals; these we cannot get before next year. You will glean from them additional particulars of this discovery, in which he has very well acquitted himself." But the "copies of his journals" were never turned over to the government, so far as is known. Fortunately, however, his map has been discovered and given to the public.* Marquette soon wrote out an account of the journey and to this the world must go for particulars concerning it.

Exceedingly brief is the mention made by Marquette of the Chicago portage; the Chicago river he does not mention at "We had seen nothing like this river," says he in speaking of the Illinois, "for the fertility of the land, its prairies, woods, wild cattle, stag, deer, wildcats, bustards, swans, ducks, parrots and even beaver, its many lakes and rivers. That on which we sailed is broad, deep and gentle for sixty-five During the spring and part leagues. of the summer the only portage is half a league." That Joliet and Marquette and their five companions were the first white men to explore the Chicago river and portage is resonably certain. "It was," says a recent writer, "in the month of September when they arrived at the place, then a broad waste of grass and prairie flowers, channeled by two lazy streams that met from opposite directions and, united, flowed into, or rather formed a connection with the lake. This was Chicago as nature made it."†

^{*}See Revue de Géographe. Paris: February, 1880. + Rufus Blanchard in his 'History of Illinois' to accompany an historical atlas of that state, p. 15.

They leave the Desplaines: they reach the Chicago river; they paddle their canoes down its turbid waters; they enter Lake Michigan, making their way to Green bay in safety. In crossing the Chigago portage, so near did the waters flowing into Lake Michigan approach those of the Illinois, and so level and low was the intervening prairie, that Joliet concluded a channel would be formed in high water that would enable boats to pass from the great lakes to the Mississippi without unloading. "Joliet," wrote the governor of Canada, "has discovered some beautiful countries, and so easy of navigation through the fine rivers which he found that a bark could go from Lake Ontario . . . to the Gulf of Mexico, one unloading (and that one at Niagara) only

being necessary to be made." "We found," says Father Marquette, in describing their journey up the Illinois river, "an Illinois town called Kaskaskia, composed of seventy-four They received us well and compelled me to promise to return and instruct them." This Indian village was about seven miles below the site of the present city of Ottawa, La Salle county, Illinois. The promise there made the missionary did not forget; therefore, on the twenty-fifth of October, 1674, with two French companions-Pierre Porteret and Jacques (his sirname unknown) one of whom was upon the Mississippi expedition, he started from Green bay for the country of the Illinois, having received the necessary orders to establish a mission at Kaskaskia. Marquette's line of travel to the mouth of the Chicago river was across the Sturgeon bay portage, in what is now northeastern Wisconsin, to the west shore of Lake Michigan, thence up that lake to the stream just mentioned, which he reached on the fourth of December, only to find its waters frozen; the ice was half a foot thick. On the journey they had overtaken five canoes of Pottawatomies and four of Illinois Indians. These savages, too, were on their way to Kaskaskia. During a month's navigation on the lake, Marquette had enjoyed fair health, but as soon as the snow began to fall he was seized with a disease from which he had before suffered.

More snow was found when they reached the Chicago river * than previously; also more tracks of animals and turkeys. Just as Marquette's companions began to draw their baggage on the ice to get to the portage, the Illinois Indians having gone on, the Pottawatomies arrived with much difficulty. During the stay of the Frenchmen at the mouth of the river, Pierre and Jacques killed three buffalo and four deer. One of the latter ran quite a distance with his heart cut in two. It was as much as Father Marquette could do to reach the eastern extremity of the portage; here he resolved to stop; he was unable to go farther. The Pottawatomies continued their journey to Kaskaskia, while Mar-

^{*}The Indians had no name for this river. The map of Joliet of 1674 shows none; and Marquette speaks of it merely as the river of the portage—"riviere du portage."—Allouez, too, in 1677, mentions it only as the "the river which leads to the Illinois." Its present name was given to the stream subsequently—being transferred from another river.

quette and his two companions took possession of a cabin which they found here unoccupied; * it was on the south branch of the Chicago river, within the present limits of the city, at a distance, by way of that stream, of a little less than five miles from Lake Michigan. Here the sick missionary was made as comfortable as the surrounding circumstances would admit, in the first house ever erected by civilized men on the site of Chicago. By whom it was built and for what purpose, it will presently appear. Pierre and Jacques contented themselves with killing three or four turkeys, of the many which were around their cabin, because these birds were almost dying of hunger. " Jacques," writes Marquette, "brought in a partridge that he had killed, every way resembling those of France, except that it had two little wings of three or four feathers, a finger long, near the head, with which they cover the two sides of the neck, where there are no feathers." On the thirteenth of December, several Illinois passed the cabin with furs which they were taking down the lake. "We gave them," says Marquette, "a buffalo and deer that Jacques had killed the day I think I never saw Indians more greedy for French tobacco than They came and threw beaver skins at our feet to get a small piece; but we returned them, giving them some pipes, because we had not yet concluded whether we should go on."

The Illinois Indians who had come on with Marquette were regular traders. They had been to Green bay to purchase merchandise with their furs. They had already become quite proficient in their new calling. Marquette declares they acted like traders and would hardly give to their friends more than the French. But they were generous with the sick missionary, for, before their departure, they gave him "for a fathom of tobacco, three fine buffalo robes." On the thirtieth of the month, Jacques, who had crossed the portage and gone to an Illinois village, only six leagues from where Marquette was cabined, returned, reporting the Indians as starving, for the reason that cold and snow had prevented their hunting.

More than two centuries ago commerce gained its first foothold in the Chicago country. The merchant of the period was the fur-trader. 1674 saw two of these domiciled upon the Illinois river, at a distance from where Marquette was now cabined of less than forty-five miles. They were Frenchmen, and one was a surgeon. The name of the latter has not come down to us, but his companion was Pierre Moreau, nicknamed La Taupine, who was a noted coureur de bois. They commenced their traffic with the Illinois Indians, who had a village on the river which bears their name, a little less than fifty miles away. Their stock in trade was the usual variety to please the savages. They probably came from Green bay, having, doubtless, heard of the country and its inhabitants from the adventurous Joliet and his companions.

^{*} Such certainly is to be inferred from Marquette's relation, although it has frequently been asserted that the cabin was erected by Pierre and Jacques for the sick missionary and themselves to occupy.

In exchange for their commodities they took furs-mostly of the beaver-at a profit, it is fair to presume, commensurate with their cupidity and the ignorance of their customers. They would send their freight in packs to Green bay, not by sailing vessel from the Chicago river, for no sail had been spread as yet on the bosom of lakes Michigan or Huron; they would be shipped in frail birchbark canoes, creeping along the shore, ready at any moment to land when dark clouds betokened a coming storm. These were to be the van of a mighty fleet indeed, as the commerce of Lake Michigan now clearly shows. These two men were the builders of the cabin occupied by Marquette and his two faithful friends. They had erected it as a depot for their furs and as a convenient place for stopping, after crossing the portage from the Desplaines.*

Moreau and the French surgeon soon learned of the illness of Father Marquette and his consequent detention in their cabin upon the Chicago river. The information was immediately acted upon by the surgeon, who repaired at once to the sick bed of his countryman. He not only visited the missionary, but brought provisions and stopped with him for a time to administer to his wants. "As soon as the two Frenchmen knew that my illness prevented my going to them," says the sick Father, "the surgeon came here with an Indian to bring us some whortleberries and bread; they are only eighteen leagues

On the twenty-fourth of January, 1685, Jacques returned with a bag of corn and other refreshments that the French had given him for the missionary. He also brought the tongues and meat of two buffalos that he and an Indian had killed just before reaching the cabin; but all the animals showed the badness of the season. Three Illinois, on the twenty-sixth brought Marquette and his two companions, from the chiefs of their tribe, two bags of corn, some dried meat, squashes, and twelve beaver skins:* first, to make him a mat; second, to ask him for powder; third, to pre-

from here, in a beautiful hunting ground for buffalo and deer, and for turkeys, which are excellent there. They had, too, laid up provisions while awaiting us, and had given the Indians to understand that the cabin belonged to the black gown (Marquette). And I may say that they said and did all that could be expected of them, the surgeon having stopped here to attend to his duties." It is a regretable circumstance that the name of this man, who was the first to practice his profession on the site of Chicago, has not come down to us. Marquette sent Jacques back with the surgeon to tell the Illinois in their village, five miles further on, that his illness prevented his going to see them, and if it continued he would scarcely be able to go there in the spring.

This is a fair inference; for it would be difficult to conceive of any other uses for which it could have been intended.

A literal translation of the word used by Marquette would make this read, "beavers" instead of "beaverskins," but what follows shows the meaning to have been as stated above; besides, it was commot use the word "beavers" for "beaver-skins," "bucks" for "beaver-skins," "does" for "doeskins," "minks" for "mink-skins," and so on.

vent his being hungry; fourth, to get some merchandise. "I answered them," says Marquette, "first, that I came to instruct them by speaking of the prayer; second, that I would not give them powder, as we endeavor to make peace everywhere, and because I did not wish them to begin a war against the Miamis; third, that we did not fear famine; fourth, that I would encourage the French to bring them merchandise." The missionary, as a mark of his gratitude for their coming nearly fifty miles to visit him, presented to his visitors an ax, two knives, three clasp-knives, ten fathoms of wampum and two double mirrors, dismissing them with a promise that he would make every effort to reach their village, were it but for a few days.

Marquette now despaired of life, and he and his two faithful companions commenced a nine days' devotion to the Blessed Virgin Immaculate. From its close he began to gain strength. On the ninth of February the now hopeful missionary wrote that none of the Illinois Indians "who had ranged themselves near his cabin had been there for the past month;" some took the road to the Pottawatomies," and some were still on the lake waiting for the navigation to open. By them Marquette sent letters to the missionaries northward. On the twentieth he writes that he "had time to observe the tide which comes from the lake rising and falling, although there appears no shelter on the lake. We saw the tide go against the wind. These tides made the water good or bad, because what comes from above flows from the prairies and small streams.

The deer, which are plentiful on the lake shore, are so lean that we had to leave some that we had killed." On the twenty-third of March the father records that they killed several partridges, only the male having the little wings at the neck. These partridges, were pretty good, but he thought they did not "come up to the French."

"On the twenty-ninth," wrote the sick man, "the water was so high that we had barely time to uncabin in haste, put our things on trees, and try to find a place to sleep on some hillock—the water gaining on us all night." However, a slight freezing caused an assuaging of the flood and the three continued their route, the next day, after so long an interruption, to the Kaskaskia village. On their way down, they met the surgeon with an Indian coming up with furs. As his canoe had to be dragged through the water, it was too cold for the Frenchman; so he cached his beaver and turned back.

At Kaskaskia, Marquette established a mission to which he gave the name of the Immaculate Conception of the Blessed Virgin. Then he started on his return, in hopes of reaching his former mission on the north side of the straits of Mackinaw—taking his way by the Kankakee and St. Joseph rivers and along the eastern shore of Lake Michigan. But he died on the eighteenth of May, 1675, and was buried in the Michigan peninsula, on the bank of a river which long bore his name, but which is now borne by a larger neighboring stream.

On the death of Marquette, Father Claude Allouez was appointed to the Illinois mission at Kaskaskia. He left

the field of his labor in what is now northeastern Wisconsin "about the close of October, 1676, in a canoe with two men," expecting to reach the Illinois Indian town so as to winter there. But cold weather setting in early, he did not get fairly embarked on Lake Michigan until the twenty-third of the ensuing March. Allouez and his companions finally entered the Chicago river, where he met eighty Indians" of the country," by whom he was handsomely received. "The chief advanced about thirty steps," says the missionary, "to meet me, holding in one hand a firebrand and in the other a feathered calumet. As he drew near, he raised it to my mouth, and himself lit the tobacco, which obliged me to pretend to smoke." Allouez was then led to his cabin and given the most honorable place. "Father!" said he "take pity on me, let me return with you to accompany you and lead you to my village. My meeting with you to-day will be fatal to me unless I profit by it. You bear to us the gospel and the prayer; if I lose the occasion of hearing you, I shall be punished by the loss of my nephews whom you see so numerous, but who will assuredly be defeated by the enemy. Embark, then, with us that I may profit by your coming into our land." This appeal could not be resisted, especially as it was to the missionary's interest to conciliate the savages, and he and his two companions embarked with them, crossed the portage and were soon at their village. Allouez did not reach Kaskaskia until the twenty-seventh of April. He found the village had much increased during

the previous year. It now contained three hundred and fifty-one cabins, occupied by representatives of eight different tribes. The Indians liked the place because they could "easily discover their enemies," from it. The missionary made but a brief stay at Kaskaskia, but he returned again the next year "to labor more solidly for the conversion of these tribes." His second visit, however, was soon terminated.

Réné-Robert Cavelier, Sieur de la Salle, was the first "to undertake the planting of colonies in these beautiful countries of the west," now brought particularly to the notice of the French government by the expedition of Joliet. But he must first petition "Louis, by the grace of God, king of France and Navarre," for a patent, which was granted "to our dear and well-beloved Robert Cavalier, Sieur de la Salle," permitting him "to labor at the discovery of the western parts of New France," for the French king had nothing more at heart than the exploration of that country through which, to all appearance, a way might be found to Mexico. There was no mention of colonization in the patent, but La Salle had his plans, and these were not only to found a commercial and industrial colony in the west, but to open a route to commerce with Mexico, by way of the Mississippi and the gulf. From what is now the city of Kingston, Canada, then Fort Frontenac, La Salle sent out his first detachment of fifteen men, in the summer of 1678, in canoes, to go to Lake Michigan and thence to the Illinois river, to trade with the Indians and collect provisions.

They were to make preparations on that stream against the day of his coming, for the Illinois country was the goal of his ambition. These were the avant-coureus of civilization in the great valley of the Mississippi.

Then followed the explorations of La Salle between the great lakes and the gulf for the next ten years, the story of which seems like the wildest romance, albeit of the utmost verity. Scarcely less wonderful are the accounts of the wanderings of his faithful lieutenant, Henri de Tonty-" equal to anything "-and of Father Louis Hennepin, another of La Salle's companions, ever ready to expose himself freely "for the salvation of others." In their narratives and letters we catch, however, only occasional glimpses of the Chicago river and portage, or even of the Chicago country.

Above the thundering Niagara, La Salle built the Griffin, a craft of not less that forty-five tons burden, in which, on the seventh of August, 1679, he and his followers embarked, and in September the vessel dropped her anchor near one of the islands at the entrance of Green bay. Here he met several of his advance party with "a pretty fair amount" of furs in their keeping, obtained in a successful traffic with the savages upon the Illinois river. packs had been taken across the Chicago portage and down the Chicago river, and were now put on board the Griffin. It was the first regular shipment of merchandise on a vessel ever made in the west. The stock was not gathered upon what is now the site of Chicago; nevertheless it passed across it. The *Griffin* started on her return, but was never heard of afterwards; all on board perished in the turbulent waves of Lake Michigan.

La Salle journeyed up that lake along its western shore, passing, but not entering, the mouth of the Chicago river. But why not? The reason was that, at the mouth of the St. Joseph, on the other side of the lake, he was to join Tonty with twenty men from Michilimackinac, who were to make their way thither along the eastern shore; otherwise, he doubtless would have crossed the Chicago portage to the Desplaines, as being a much nearer route to the Illinois. The head of the lake was reached on the twenty-eighth of October, "when," says Father Hennepin, "we went out to scout, as we were accustomed to do in the woods and prairies. We found very good ripe grapes, the berries of which were as large as Damson plums. To get this fruit, we had to cut down the trees on which the vines ran. We made some wine, which lasted us nearly three months and a half, and which we kept in gourds. These we put every day in the sand to prevent the wine from souring; and, in order to make it last longer, we said mass only on holidays and Sundays, one after the other. All the woods were full of vines which grow wild. We ate this food to make the meat palatable, which we were forced to eat without bread."

The first difficulty ever had with the savages in the Chicago country was between La Salle and a party of Fox Indians. It was some distance above

the mouth of the Chicago river where it happened. It occurred on the thirtieth day of Oct., 1679. The Foxes numbered a hundred and twenty-five, while the Frenchmen could arm but eleven men. The savages had purloined some valuables from La Salle, and he resolved to take a prisoner and hold him as a hostage for the return of the articles. An "important" Indian was captured from the band, when the Frenchmen sent the rest word that if they did not bring back all they had stolen, he would put their comrade to death. The savages determined to rescue their companion. They all advanced, arms in hand, to begin the attack. La Salle's party was encamped on a peninsula, separated from a wood, where the Indians appeared, by a long sandy plain, two gun-shots wide. At the end of this plain, towards the wood, La Salle noticed that there were several small mounds, and that the nearest one commanded the others. This he occupied at once. Seven or eight of the savages had guns; the residue were armed with bows and arrows only. The bold manœuvering of the Frenchmen finally induced the Foxes to lay down their arms, and the affair ended by the Indians presenting some beaver robes to La Salle.

After reaching the Illinois and building Fort Crèvecœur in January, 1680, near the site of the present city of Peoria, La Salle was obliged to return to Fort Frontenac. By the fourth of November he was back again to the mouth of the St. Joseph. He writes disparagingly of Chicago river and portage. "The basin you enter," he says,

"to go from the Lake of the Illinois (Lake Michigan) to the divine river (the Desplaines) is no ways suited for the communication, there being no anchorage, wind or entrance for a vessel. or even for a canoe unless there is a great calm-the prairies, by which a communication is pretended, being overflowed every time it rains by the drainage of the neighboring hills. It is very difficult to make a channel and keep it open without its becoming immediately filled with sand and gravel, and you cannot dig in the ground without finding water, and there are sandhills between the lakes and the prairies. Even were this channel possible at great expense, it would be useless, because the divine river (Desplaines) is unnavigable for forty leagues from there to the great village of the Illinois."

However, notwithstanding La Salle's unfavorable sketch of the Chicago river and portage, he resolved to go that way from the mouth of the St. Joseph on his return trip to the Illinois. Father Zenobe Membré, a Récollet friar, was one of La Salle's advance party to Chicago. "On the twentyfirst of December," (1681) he writes, "I embarked with the Sieur de Tonty and a part of our people on Lake Dauphin (Lake Michigan) to go toward the divine river (Desplaines), called by the Indians Checagou,* in order to make necessary arrangements for our voyage. The Sieur de La Salle joined us there

^{*} Synonyms: Chekakou, Chicagou, Chicagoux, Chikajo, Chekagou, Chigagou, Chegakou, Chikagu, Chikagou, Chicagu, Eschecagou, Eschikagou, Chikago, Chicago.

(at what is now known as the Chicago river) and the rest of his troops, on the fourth of January, 1682, and found that Tonty had had sleighs made to put all on and take us over the Checagou (Desplaines), which was frozen; for though the winter in these parts is only two months long, it is notwithstanding very severe."†

"This is an isthmus of land," says La Salle, in speaking of the Chicago portage, "at forty-one degrees fifty minutes north latitude, at the west of the Illinois lake (Lake Michigan), which is reached by a channel formed by a junction of several rivulets or meadow ditches. It is navigable about two leagues (less than five miles) to the edge of the prairie, a quarter of a league westward. There is a little lake, divided by a causeway made by the beavers, about a league and a half long, from which runs a stream which, after winding about half a league through the rushes, empties into the river Checagou (the Desplaines) and thence into that of the Illinois."

The subsequent journeyings of La Salle—his discoveries—his death—are not germane to our subject; so we will not describe them; mentioning only that

in March, 1683, on the famous "Starved Rock" of the Illinois river he finished Fort St. Louis. The Sieur de Tonty was soon after placed in command of this fort, and, being informed in the spring of the next year that the Iroquois were about to attack him, he prepared to receive them, sending also a canoe to Michilimackinac, to Captain Olivier Morel de la Durantaye, who commanded there, for assistance. Durantaye reached Tonty by way of the Chicago river and portage in good time, with sixty Frenchmen. Not long subsequent to this, he erected a fort at Chicago, where, in the last days of 1685. Tonty in journeying from Michilimackinac to his post on the Illinois, found him in command. But this fort was soon abandoned.

La Salle in all his wanderings-in all the vicissitudes of his fortunes-had no more faithful adherent than M. Joutel, a fellow-townsman, who was present at the death of the former on the eighteenth of March, 1687, in the present state of Texas. He reached Fort St. Louis on the fourteenth of the following September, on his way to France. Joutel soon "repaired" to Lake Michigan to embark for Canada. "It would be needless," are the words of that persevering Frenchman, "to relate all the troubles and hardships we met with in that journey. It was painful and fruitless; for, having gone to the bank of the lake in very foul weather, after waiting there five days for that foul weather to cease, and after we had embarked notwithstanding the storm, we were obliged to put ashore again-to return to the place where we had embarked, and there to

[†] On the twenty-first of December (1681), Tonty and Membré set out from Fort Miami (at the mouth of the St. Joseph river) with some of the party in six canoes, and crossed to the little river Chicago. La Salle, with the rest of the men, joined them a few days later. It was the dead of winter and the streams were frozen. They made sledges, placed on them the canoes, the baggage and a disabled Frenchman, crossed from the Chicago to the northern branch of the Illinois (Desplaines), and filed in a long procession down its frozen course.—Parkman's 'La Salle and the Discovery of the Great West.' (Ed. of 1879,) p. 276.

dig a hole in the earth to bury our baggage and provisions, to save the trouble of carrying them back to Fort St. Louis, whither we returned, arriving there the seventh of October." There was no storehouse-no freight depot-in Chicago then for Joutel to patronize. He remained in the fort until December, "when," he writes, "two men arrived from Montreal. They came to give notice to M. Tonty that three canoes laden with merchandise, powder, ball and other things, were arrived at Chicago." There being too little water in that river, and what there was being frozen, these canoes could not be brought any farther. However, by the help of forty Shawnese sent by Tonty with some Frenchmen, the ammunition and merchandise were soon brought, "and very seasonably," to Fort St. Louis.

Joutel again started for Canada on his way to France, from Fort St. Louis, on the twenty-first of March, 1688. On his way to Chicago he had the misfortune to hurt one of his feet. He reached the place on the twenty-ninth. His first care was to seek what he had stored in the earth during his previous voyage to that locality. He found his cache had been opened and some furs and linen taken therefrom. This had been done by a Frenchman whom Tonty had sent from his fort on "Starved Rock," during the winter, to find out if any more canoes had been detained there, and to see whether Joutel's property had been meddled with. Bad weather obliged Joutel to remain at Chicago until April. The days of resting were advantageous for the healing of his foot. Since the

time of Marquette's lying sick in his lonely cabin there, game had become scarce. "We had," says Joutel, "nothing but our meal, or Indian wheat, to feed on; yet we discovered a kind of manna, which was a great help to us. It was a sort of tree, resembling our maple, in which we made incisions, whence flowed a sweet liquor, and in it we boiled our Indian wheat, which made it delicious, sweet, and of a very agreeable relish. There being no sugar canes in that country, those trees supplied that liquor, which, being boiled up and evaporated, turned into a kind of sugar, somewhat brownish but very good." This was making maple-sugar on the site of the present city of Chicago, doubtless under some difficulties. "In the woods," continues Joutel, "we found a sort of garlic, not so strong as ours, and small onions very like ours in taste." Joutel finally left the place on the fifth of April, coasting along the west side of the lake "to shun the Iroquois."

We now come to the mention made of Chicago by the Baron La Houtan. whose wonderful relations of what he saw in the west are known to be, many of them, pure fabrications. He occasionally, however, stumbles, as it were, upon the truth. He, in his travels, reached, on the sixteenth of April, 1689, M. de Tonty, on the Illinois river, "who received me," he says, "with all imaginable civility." He stayed three days with Tonty, "where there were thirty coureurs de bois that traded with the Illinois." "The twentieth," continues the baron, "I arrived at the village of the Illinois, and to lessen the

drudgery of a great land carriage of twelve great leagues (he here refers to the Chicago portage!) engaged four hundred men to transport our baggage, which they did in the space of four days, being encouraged by a bribe of a great roll of Brazilt obacco, a hundred pounds weight of powder, two hundredweight of ball and some arms, which I gave to the most considerable men of their number." On the twenty-fourth they reached "Chekakou," where La Houtan's Fox Indians left him, he says, in order to return to their own country, "being very well satisfied with a present I made them of some fusees and pistols." He embarked the next day on Lake Michigan, and by rowing hard in a calm made the mouth of the River St. Joseph on the twenty-eighth. "There," says he, "I met four hundred warriors upon the very same place where Mr. de La Salle had formerly built a fort." Through all this there runs, evidently, a vein of truth, but it is buried so deep in exaggeration as to be scarcely discernible.

Published accounts are wanting as to the Chicago river and portage for the next ten years, when another traveler—far more reliable than La Houtan—reached the mouth of that stream. It was J. F. Buisson St. Cosme, a Canadian priest, who was on his way to the Mississippi. As St. Cosme approached the Chicago river, coming up Lake Michigan on its western shore from Michilimackinac, he and his party found considerable difficulty in getting ashore and saving their canoes. They had to throw everything into the water a half

league from the mouth of the stream. This was the twenty-first of October, 1699. From the point of debarkation, St. Cosme, with the Reverends Francis Joliet de Montigny and Anthony Davion, went "to the the house of the reverend Jesuit fathers," by land, "our people," says St. Cosme, "staying with the baggage." There they found the Reverend Fathers Francis Pinet and Julian Binneteau, "who had recently come in from the Illinois and were slightly sick." Here there had been founded, some time before, a Jesuit mission among the Weas, a band of the Miami Indians. "Their house." says St. Cosme, "is built on the banks of a small lake-having the lake on one side and a fine large prairie on the other. The Indian village has over one hundred and fifty cabins, and one league on the river there is another village almost as large. They are both of the The Reverend Father Pinet makes it his ordinary residence here, except in the winter, when the Indians all go hunting, when he goes to the Illinois. We saw no Indians there; they had already started for their hunt." Now. these Miami Indians, as just mentioned, were of the Wea tribe;* but how long they had had possession of Chicago river and portage is not known; it could only have been a brief period, as, down

^{*} Synonyms: Onouaiatious, Syatanous, Wawaghtanakes, Wawaightonos, Wawaightan, Wawiotonans, Wawioughtanes, Wiatonous, Wyatanous, Wyachtenocks, Ouiatanous, Ouias, Ouicatanou, Wayoughtanies, Wawiachtens, Wehahs, Ouiatanous.

to the year 1689, no mention is made of them by any one traveling that way.†

The Weas-the first people known to have been regular residents of the present city of Chicago-were one of the bands of the Miami confederation; the others were the Miamis proper, the Eel-Rivers and the Piankishaws. Weas were well spoken of by St. Cosme. "If we may judge of the future," says he, "by the little while that Father Pinet has been on this mission, we may say that God blesses the labors and zeal of this holy missionary. There will be a great number of good and fervent Christians there. It is true that little fruit is produced there in those who have grown up and hardened in debauchery, but the children are baptized, and even the medicine men, most opposed to Christianity, allow their children to be baptized. They are even very glad to have them instructed; many young girls already grown up, and many young boys are being instructed, so that it may be hoped that when the old stock dies off, there will be a new Christian people."

On the twenty-fourth of October, the wind having fallen, St. Cosme and his companions brought into the river all their baggage, and seeing the waters were extremly low they made a cache on the shore and took only what was absolutely necessary for their voyage along with them, intending in the spring to send for the rest. One of the party—"Brother Alexander"—was left in charge of these effects, who consented to remain with Father Pinet's man during the winter.

St. Cosme and his party started on the twenty-ninth, "and put up for the night about two leagues off, in the little river which is then lost in the prairies." The next day they began the portage, "which is about three leagues long when the water is low," says St. Cosme, "and only a quarter of a league in the spring, for you embark on a little lake (Mud lake) that empties into a branch of the river of the Illinois, and when the waters are low you have to make a portage to that branch."

The half of the portage was made that day and they would have made further progress had they not discovered that a little boy of the party, having started on alone, although he had been told to wait, had got lost without any one paying attention to it, all hands being engaged. The whole were obliged to stop and look for him. All set out, several guns were fired, but he was not found. It was a very unfortunate mishap. They were pressed by the season, and the waters being very low they saw but too plainly that, being obliged to carry their effects and their canoe, it would take them a great while to reach the Illinois. This induced them to separate their company-a portion went on, but St. Cosme and four others returned to look

[†] Charlevoix says they were settled there as early as 1671. "Fifty years ago," are his words, "the Miamis were settled on the southern extremity of Lake Michigan, in a place called Chicago, from the name of a small river which runs into the lake, the source of which is not far distant from that of the river of the Illinois [Desplaines]. As this was written in 1721, it makes the Weas residing there in 1671, as above stated; but this is, undoubtedly, too early a date.

they met Father Pinet and Binneteau. who were going with two Frenchmen and one Indian to the Illinois. The boy was searched for all that day but in vain. The next day being the feast of All Saints, St. Cosme felt it to be his duty to go and pass the night at Chicago with the rest of his people, who having heard mass and performed their devotions early, spent all that day looking for the lost boy, but without getting the least trace of him. It was very difficult to hunt for the lad in the tall grass, "for the whole country is prairies," says St. Cosme, "you meet only some clumps of trees. As the grass is high," he continues, "we durst not set fire to it for fear of burning him. M. de Montigny told me not to stay over a day, because the cold was becoming severe." This obliged him to start, after giving directions to a man who was to remain over winter there, to look for the boy and to call to his assistance some other Frenchmen who were then at Chicago. The lad, after an absence of two weeks, made his way back to the river, where the Frenchmen were, in a sad plightquite crazed and utterly exhausted.*

The next year (1700) Father James Gravier, one of the earliest missionaries in Illinois, where he subsequently received wounds which caused his death. makes mention of the receipt at Chicago of a letter from Father de Lamberville. He left that place on the eighth of September of that year to go down the Illinois river and the Mississippi to its mouth, to visit the colony just founded by Iberville. Chicago, therefore, at the end of the seventeenth century was still a mission station; but how long it continued there is nothing extant to show. Before the ending of the year the Weas at Chicago had sung the war song not only against the Sioux but the Iroquois as well; however, by the urgent solicitation of some Frenchmen they were induced to lay down their arms. Not long before the year 1718, the Weas had left Chicago river † and settled upon the Wabash in the present state of Indiana.

It was in the year 1721 that the Reverend P. F. X. de Charlevoix visited the St. Joseph river, in the present state of Michigan, on his way to Louisiana. On the eleventh of September he left the mouth of that stream, intending to journey by way of Chicago, coasting the south shore of Lake Michigan, but he found the lake so rough that he thought

for the little boy. On their way back Boys still get lost on the site of Chicago, they met Father Pinet and Binneteau, but it is not the tall grass that bewilders who were going with two Frenchmen them.

^{*}I will tell you that M. de Montigny took a boy twelve or fifteen years old with him, who got lost while making the first portage in the prairies, M. de St. Cosme remained with five men and spent two days looking for him without being able to find him, and during this time I and two others with M. de Montigny made a portage of two leagues. This boy made his way to Chicagou, where Brother Alexander (the Frenchman left to guard the cache during the winter) was, thirteen days after. He was utterly exhausted and was out of his head.—M. Thaumur de la Source, in 'Early Voyages Up and Down the Mississippi,' p. 85.

⁺ Memoir on the Indians of Canada as far as the River Mississippi, with remarks on their manners and trade, 1718. In 'Documents Relative to the Colonial History of the State of New York,' vol. ir, p. 890.

it better to return, concluding finally to take the Kankakee route. However, he has left on record what he had learned of "the little River Chicagou." "After going up it," he says, "five or six leagues, they pass into that of the Illinois by the means of two portages, the longest of which is but a league and a quarter. But as this river is but a brook at this place, I was informed that at that time of the year (September) I should not find water enough for my canoe; there tore, I took the other route, which has also its inconveniences and is not near so pleasant, but it is the surest.

Little has been put upon record of the Chicago river and portage after the description by Charlevoix, down to the period of the American Revolution. One principal reason for this is the fact that some of the Indian tribes, particularly the Foxes, living upon the river in the present Wisconsin which bears their name, became hostile to the French, and at various times actual war was carried on between them. Situated as they were, contiguous to the Winnebagoes, the Menomonees and the Pottawatomies, upon Green bay, these tribes were finally induced to take up arms against the French. The Foxes, by the aid of their allies, not only commanded the portages to the northward connecting the waters of the great lakes with the Mississippi, but also that of Chicago, which, as a consequence, was frequently closed to travelers going from Canada to Louisiana. Indeed, for the fifteen years following the visit of Charlevoix to the St. Joseph, it may be said there was, practically, no travel that way.

The Foxes, at the summons of De la Barre, as early as 1684, sent warriors against the Five Nations. They also took part in Denonville's more serious campaign, but soon after became hostile to the French. As early as 1603 they had plundered several who were on their way to trade with the Sioux, alleging that they were carrying arms and ammunition to their ancient enemies. This caused the traders frequently to pass to the Mississippi by making portages to the southward, as far sometimes as Chicago. Afterwards these savages became reconciled to the fur-traders, but the reconciliation was of short dura-In 1712 the fort at Detroit, then defended by only a handful of men. was attacked by them, in conjunction with the Mascoutins and Kickapoos. However, in the end, by calling in friendly Indians, the garrison not only protected themselves but were enabled to act on the offensive, destroying the greater part of the besieging force.

The Foxes continued their ill-will to the French. The consequence was that their territory in 1716 was invaded and they were compelled to sue for peace. But their friendship was not of long continuance. In 1718 they numbered five hundred men, and "abounded in women and children." They were spoken of at that date as being very industrious, raising large quantities of Indian corn. In 1728, another expedition was sent against them by the French. Meanwhile, the Menomonees had also become hostile; so, too, the Sacs, who were the kindred and allies of the Foxes. The result of the enterprise

was an attack upon the first-named tribe, and their defeat by the French; the burning of the wigwams of the Winnebagoes-that tribe also being now hostile-and the destruction of the fields of the Foxes. Again, in 1730, the latter were attacked in their own country by the French and defeated. In 1734 both the Sacs and Foxes came in conflict with the same foe; but this time the French were not as successful as on previous expeditions. These two tribes, in 1736, were "connected with the government of Canada;" but it is certain they were far from being friendly to the French.

The conflict between France and Great Britain, commencing in 1755, found the Sacs and Foxes allied with the former power against the English. At the close of that contest, so disastrous to the interests of France in North America, these tribes readily gave in their adhesion to the conquerors, asking that the English traders might be sent them. The two nations, then about equally divided, numbered, in 1761, about seven hundred warriors. Neither of the tribes took part in Pontiac's war; but they befriended the English.

From the time a permanent peace had been established between the French and the Fox Indians, the route from the valley of the St. Lawrence to that of the Mississippi had remained open by way of the Chicago river and portage to traders and travelers, and continued so to the English when they gained possession of the country. During the Revolution the savages from the north gath-

ered here to make war upon the Illinois towns after they came into the possession of the Americans. The Chicago country was now the home of a portion of the Pottawatomies; there was a village on the river of that tribe, and also a stockaded fort at the entrance of the stream, * not occupied, however, except by traders, although once during the war British troops from Detroit were here for a brief period. These Indians (who, as will be hereafter seen, occupied the Chicago country down to the time within the memory of many persons now living), when first seen by the French were the neighbors of the Winnebagoes upon Green bay, in the northeastern part of the present state of Wisconsin. When, in 1669, Father Allouez visited that country, he found in a village of that tribe upon the southeast shore of the bay, Indians of three other tribes living with them-Sacs, Foxes and Winnebagoes. The next year the Pottawatomies were still in the same locality, occupying two villages, and ten years after they occupied at least one village in the same region.

At the expiration of the first quarter of the eighteenth century, a part only of the Pottawatomies were in the vicinity of Green bay—upon the islands at its mouth. These islands were then known as the Pottawatomie islands, and they are considered as having been the ancient abode of this tribe. Already had a large portion of these savages migrated southward, occupying the Chi-

^{*}See "A New Map of the Western Parts of Virginia, Pennsylvania," etc. By Thomas Hutchina, London 1778.

cago river and portage and the country of the St. Joseph river in the present state of Michigan, some having gone so far eastward as to be near Detroit. Those upon the St. Joseph, at the commencement of the Revolution and for a considerable time thereafter, had their village on the south side of the stream,

at the portage which led across to the waters of the Kankakee. In their village at Chicago there was settled a person who was the first to give the place a permanence as the abode of civilized man.

CONSUL WILLSHIRE BUTTERFIELD.

WILLIAM H. BROWN.

Any mention of the coal interests of Pittsburgh, however brief, that failed to touch on the life of the late William H. Brown and of the great enterprises he set on foot, would fail of its purpose and become a fragment of a sketch and no history at all. Ten years have passed since he laid down the labors and responsibilities he had so long and so ably borne, but his memory and energy still live in the great firm of W. H. Brown Sons. He was for a long time a notable figure in the coal trade of the west, and in his special field of producer and dealer, did much to develop the resources of western Pennsylvania, and place the business upon an important and substantial basis.

Mr. Brown was a self-made man, and understood his special field of labor in every point and detail. He had learned it from the foundations up. He was born in North Huntington township, Westmoreland county, Pennsylvania, on January 15, 1815. At an early age he

set out to do for himself, and being of a robust build, with unlimited courage. and a willingness to do thoroughly and well whatever came to his hands, he had no trouble in making headway against the world and rising steadily step by step. He was employed for some time on the canal, which was the great highway of travel and artery of commerce in those days; worked for a while on a farm that is now in the corporate limits of Pittsburgh; dug coal in the winters; rose in a short time to the ownership of a horse and wagon, with which he delivered coal to his customers, and before long was employing a number of men and teams for the supplying of coal to Pittsburgh furnaces. He was the kind of a man that could not be kept down.

New avenues and methods of business naturally suggested themselves to his active mind. In 1845 or 1846, when the roads were in a bad condition between Pittsburgh and his source of sup-



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Wan Je Brown



ply at Minersville, the thought came that coal might be floated down the Monongahela at less cost and toil than to carry it in wagons. Mr. Brown saw the advantage of this plan, but not having the capital for the purchase of a boat, drew on his good name, and purchased a flat on time. In a short time he was enabled to make a still greater venture, and in company with other Pittsburgh parties, purchased a mine in the second pool of the Monongahela, known as the Miller mine. His views and those of his partners as to the manner in which the business should be conducted were diverse, and the partnership was of short duration. Mr. Brown was daring and radical, and in one account of his life, published some time ago, I find the following references to that episode of his business career:

His notion of risking all dangers and taking all profits to be made in the line of legitimate trade was alarming to those who regarded the river as little else than an invitation to destruction, and its trade so full of risks and uncertainties as to seem almost like gambling with fate. The Messrs. Herron, who owned two-thirds of this mine, were in the majority, and insisted on selling the coal in Pittsburgh, and the boats with the cargoes on board, when the local trade was not active, to those who made a business of trading down the river. This was not satisfactory to Mr. Brown, who thought that if others could make a profit in that way, he could do the same with the same amount of attention.

The result was a dissolution, Mr. Brown selling his interest to his partners.

In 1848 Mr. Brown formed a connection with Messrs. Lloyd & Black, owners of the Kensington Iron works, located in Pittsburgh, on the Mononga-

hela. They began mining and operating in coal at the Nine Mile run, on the Monongahela, and coaking with four ovens. Mr. Brown had charge of the business, and managed it in accordance with his ideas as to when risks should be taken or not, and what lines of policy should be pursued. The main portion of his trade was still with Pittsburgh, but when he had a surplus he disposed of it on his own plan, sending it down the river to Louisville and Cincinnati, and reaping a large success in that line of trade. His business and reputation grew apace, and by steady progress in his chosen line of activity soon found himself in the very front rank thereof, and recognized as one of the master spirits of the trade.

In 1858, Mr. Brown ventured on still another experiment that the wisest of the coal men were, in advance, moved to declare would be a failure. But his keen judgment had been brought to bear upon the problem, and he had the courage to meet the chance of disaster, and shoulder the loss if any should befall. His new purpose was to send a tow of flats from Louisville to New Orleans. "Prior to that time," says one account of the venture, "coal had been floated to New Orleans instead of towed by steamers, but it was done with barges, a class of large keel boats, and the expense of the trips did away with the profits. Towing was accordingly in no favor among shippers of coal to the lower ports, even with the most substantial boats; and when Mr. Brown was about to send a tow of flatboats, or rather boxes of light and shallow

construction, he was considered to be wild."

His "wildness" was that of successful inventors and pioneers in new paths of usefulness since the world began. He made the venture, it proved a success, and others made haste to crowd into the new way he had opened. He sent twelve boats, carrying about two hundred and thirty thousand bushels of coal, with the steamer Grampus on one side, and the General Larimer on the other. His son, Captain Sam Brown, was in charge. The trip was a success beyond question. The coal was disposed of at remunerative rates, and there was no loss to the cargo. Captain Brown disposed of the flats, loaded his steamers with sugar and molasses, and came home in triumph. The keen vision of William H. Brown had been justified by the results, and a new outlet to the growing coal trade of Pittsburgh was opened.

With the widening of his business, Mr. Brown was compelled to increase his facilities. At first he hired his towing, but afterwards purchased the General Larimer, which was the first tow boat he ever owned. The first steamer built by him was the W. H. B., and he afterwards had the Bee constructed, and sent her on her journeyings up and down the river. At a later date he purchased the Collier and the Shark, which were added to his busy fleet.

Every year that passed saw an increase in his operations. He soon became the acknowledged head of his department of the coal business, and his judgment was accepted without ques-

tion on all matters connected with the trade. On the breaking out of the war he secured important contracts for the supplying of the government, at Cairo and Memphis, with coal for the Mississippi fleet. At about the same time he began to supply St. Louis with coal for her gas works. It was not only a time of the most intense business activity with him, but one of close watchfulness and severe responsibility. I again quote from the account noted above:

Mr. Brown's transactions became so large as to attract the especial attention of the whole trade. The exciting times of the war, the dangers of traffic in supplying fuel to the government forces within the lines of the enemy a considerable part of the time; supplying markets during a time and under conditions which render every cargo especially liable to capture, confiscation and destruction by armed forces, not only regular but guerrilla as well, to say nothing of the increased dangers to navigation itself, were a state of affairs entirely congenial to his spirit of enterprise. It was attended with risks that other men did not dare to venture, and he made it pay. The profits were proportionate to the risks. He was successful. "Lucky" was the verdict of some, but those who were closest to his confidence are not backward in their testimony that there was something more than mere luck in such success. He knew the dangers, he faced them with nerve, handled his affairs with skill and in accordance with the evervarying phases of the times; originator of his own plans, a copyist o none.

The effect had on the coal trade of western Pennsylvania by the courage and genius of William H. Brown, in demonstrating how an immense trade could be done with the lower river ports in such bulk as to lessen the cost and make it profitable, was of permanent and immense value. Here are some figures of importance, in illustration of the above statement. In 1857 the total exports of coal and coke from the Monongahela

were 28,973,596 bushels. Trade was slack in the following year in consequence of the panic, and the shipments fell to 25,696,669 bushels. By practically opening up this new means of reaching New Orleans, the exports from the Monongahela increased so rapidly that in 1860 they amounted to 37,047,732 bush-Then the war came on, and the shipments in 1862, notwithstanding the amounts supplied the governments, had fallen to 18,583,956 bushels. With the opening of the river after the surrender of Vicksburgh, trade began to show greater volume, and in 1865, the shipments amounted to 39,522,792 bushels. "Mr. Brown had made money, the risks were over, and the whole valley seemed to be anxious to send coal down the river. Accordingly in 1866 the lower markets were glutted with 42,605,300 bushels, and the shipments in 1867 declined to 30,072,700 bushels. The lesson was a good one to many, and from that time to this the notion has been far less prevalent that anybody can run coal down the river and make money. The trade has fallen into experienced hands exclusively, and it increased in volume until in 1877 it had reached the sum total of 79,480,918 bushels."

Close application to business, and the great responsibilities which Mr. Brown had so long carried, began at last to tell upon him, and in 1873 his health failed and he found himself compelled to allow the most of his duties to fall on the shoulders of those about him. A couple of years of rest gave him no relief, and in 1875 he went to Philadelphia for treatment. While there he was attacked by

paralysis, and passed peacefully away on October 12, 1875. Pittsburgh felt as though one of the most useful of her pioneer businesss men had passed away, and many and sincere were the expressions of grief. That Mr. Brown was a large-brained and remarkable man, was well proved in the works he performed, and the great wealth of which he died possessed, was the result of his own labor, sagacity and courage. He made the coal business a specialty, and allowed no miscellaneous speculations or ventures to divert him from what he had chosen as the chief business of his life, although in later years his capital was invested here and there in worthy enterprises devoted to the development of the resources of western Pennsylvania, or building up its trade. On his departure from the scene of his labors, one of the journals of Pittsburgh well said:

His death will not cause a decline in securities or make or mar the fortunes of corporations as would the demise of some heavy stock manipulators, but his loss will be severely felt in the branch of trade in which his energies were the most conspicuous.

Among the strong traits of his character were industry, untiring energy, and a far-seeing business vision. That he had the nerve to take great risks is well demonstrated in what has gone before. His perseverance was a marvel, and his capacity for work seemed almost endless.

Mr. Brown was married in Pittsburgh to a daughter of Mr. Samuel Smith, of Minersville, a lady of high education, refinement and culture, and a graduate of the leading academy of western Pennsylvania. She was a noble helper

all through life, aiding him in many practical ways in his early struggles, and sharing with him in after years the fruits of their mutual toil. She preceded him into the great beyond. Six children were born to this union, four sons and two daughters. The firm is now known as W. H. Brown Sons, composed of S. S. and Harry Brown, and worthy successors to their father have they proved over one thousand boats, barges and themselves to be. Not only have they held the firm up to its high reputation equipped, employs a small army of men, ing, but they have kept it in the fore- most active and successful of the busifront of the coal business as well. Their ness establishments of western Pennnames are known and respected in every sylvania. The above firm is also port between Pittsburgh and New Or- represented by the firm of Brown & leans; and as an indication that the Cochran, as producers and shippers business has suffered no decline in their by rail and tiver of Connellsville coke. hands, it may be noted that the ship-

ments from 1869 to 1874, the latter years of the life of W. H. Brown, were from six to seven million bushels annually; whereas in 1879, or four years after his death, the shipments were nearly nine million bushels, and in 1880 were over twelve million bushels. The firm owns five tugs and fourteen steamboats to furnish the motive power for its fleet of flats; has five coal roads thoroughly for enterprise and fair and manly deal- and is in every respect one of the largest, J. H. KENNEDY.

THE BEGINNINGS OF SOME PUBLIC ENTERPRISES IN WESTERN PENNSYLVANIA.—SKETCH OF DR. JAMES R. SPEER.

A PECULIAR interest attaches to the place and time and circumstances from which important national or commercial or religious movements have derived their origin. Men are not satisfied until a river is traced up to its fountain heads. Few members remain of the generations which began to give form upon the western side of the Alleghany mountains to the industries, the means of communication, the agencies of education and religion, which have now spread their beneficent power over the valleys of the Ohio and the Mississippi,

and indeed we should say over the continent. It is profitable to gather up from various sources the incidents of the lives yet spared which link us with the past, and especially in the cases of any who have taken an active part in transactions of historical and abiding value. One meets in the streets of Pittsburgh to-day a gentleman, active in his physical movements, taking a lively personal concern in public affairs and the advancement of science and religion, who was born during the presidency of Washington, lived in Ohio before it be-



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came a state, and has had a close relation to the beginnings of some of the most important public enterprises of this part of our land. There are some points of remarkable interest in his history. We may notice first his strictly professional career.

Among the eminent medical men in the United States west of the Alleghany mountains, James Ramsey Speer of Pittsburgh holds a high position. He had already achieved a reputation in the region by his success in some surgical operations upon which none of the profession there had yet ventured, when in 1825, while only in his twenty-ninth year, he fixed his residence at that city. He rose there soon to a fame which extended to the neighboring states, and brought patients from the east of the mountains on the one side, and from the borders of the Mississippi on the other side, to obtain the benefits of his skill. He performed, sometimes by new and ingenious methods, operations for aneurism and injuries of the largest arteries outside of the thoracic and abdominal cavities. for the removal of ovarian tumors, the relief of strangulated hernia, that of cerebral injuries by the use of the trepan, the removal of foreign substances from the trachea, the extirpation of cancer in various parts of the body, the correction of congenital distortions of the extremities, and others of much interest. Upon the eye he bestowed special attention. He operated, during the course of his practice, upon about six hundred cases of cataract, many times for iridectomy, the formation of a lachrymal duct, and almost every other form of relief for dis-

orders of the eye and its appendages. His skill in the diagnosis of obscure diseases and scrupulous honor in delicate circumstances were recognized in the frequency with which he was called to consultation with his brethren of the profession. His medical character was peculiarly marked by his native genius for his vocation, his subtle instinct in the perception of disorders and the adaptation of remedies; by his personal affection for his patients, and interested enthusiasm in devising and affording relief; and by his almost utter negligence as to the publication of important surgical and medical cases, leaving in several conspicuous ones other men to report them and to assume the credit of them, and his carelessness as to the pecuniary returns. The modesty and simplicity of his nature, and its transparent sincerity and kindness, have given a finish of unusual attractiveness to his character as a man, and depth and endurance to the attachment of his friends.

The invasion of the Asiatic cholera in the year 1832, and the universal terror created by the first appearance of this tropical pestilence, brought forth an interesting expression of the public confidence in Dr. Speer as a comparatively young practitioner. He was selected by the city council of Pittsburgh to be the chairman of a committee of medical men who should consider and publish to the population of the region the sanitary measures necessary to prevent the introduction and spread of the disease, and the remedial treatment required in the cases of those attacked by it. His

personal labors during the prevalence of it were fearless, unremitting and largely successful. Upon one terrible night, following a day of exhausting and painful toil, when about to retire to needed rest, he was summoned to hasten first to one, then to another, then to a third, and before morning to a fourth agonized sufferer. The first case in the city was that of an intelligent and respectable colored man, "Bill Lyon," then steward of a Mississippi steamer, who had once been a slave in the family of Mrs. Speer's grandparents.

Dr. Speer's reputation abroad led to solicitations for his removal to other cities, among which was an election to a medical professorship in Baltimore. It was often difficult for him to obtain for patients coming from other places, who required surgical operations and careful attention, the diet and service which were necessary in their cases. Thus he was led to undertake, about 1843, a house suitable for such patients in Allegheny. Some could pay for medical attendance and boarding; others could not, and went off in arrears for larger or smaller amounts. The burden of such an establishment upon one individual was too great for it to be continued longer than during one or two years. Its chief interest consists in it having been begun before any such provision of a medical kind had yet been attempted by others. It was widely noticed in the newspapers of that day, and helped to create a sense of the need of charitable institutions for the relief of suffering in various forms. Thus it was a germ of the noble hospitals which now

exist in the communities of which Pittsburgh is the centre. It was designed to be an infirmary for ophthalmic and surgical cases; and could it have been nurtured by some organized or legislative aid, such as is available in the present day, might have become a permanent institution. His interest in the advancement of his profession also led him to consider at different times the feasibility of planting a school of medicine in Pittsburgh and Allegheny. As chairman of a committee of the trustees of Western university, of which the other members were the late Dr. James King, surgeon-general of the state during the war, and Dr. R. B. Mowry of Allegheny, he prepared only a few years ago an elaborate report indicating its possibility under certain conditions. Such an institution may be reared under more favorable circumstances, but the number of medical schools in larger cities within easy reach by railroad and possessing superior means for the prosecution of some departments of preparation on the part of students, seemed to render an additional institution of that kind not needed in the locality at that time.

DISCOVERY OF SALT IN WESTERN PENN-SYLVANIA AND ITS CONSEQUENCES.

The interest of James Speer in new and important enterprises was kindled from his early boyhood by intercourse with several relatives who were actively engaged in some of this character. One of them claims historical record—the discovery of salt in western Pennsylvania.

William Johnston, born near Gettysburg, a man of remarkable energy, courage and nobillty of character, settled about the opening of the century upon a large body of land on the Conemaugh river, at its junction with the Lovalhanna. The most difficult to obtain of the common articles necessary for life and the development of the country were salt and iron. Salt was brought with great difficulty and expense, at first from the east on pack-horses, afterwards from western New York by the Allegheny river, and later still from the Kanawha river. It sold at about five dollars a bushel; fifteen times the present price. During the war of 1812-15, it became exceedingly scarce and dear. Johnston having noticed a lick to which the deer and cattle resorted, two miles above his house on the river, determined to-bore there for salt. He enlisted William Shields as a partner, and with rude apparatus, using a bent sapling as a spring to raise the auger, sank a well to the depth of three hundred feet without success. James Speer was with him on the morning when the final decision was made as to the continuance of the effort. Mr. Shields said vehemently that he had spent fifteen hundred dollars and would go no further. Mr. Johnston determined to bore on. Within ten days they reached abundant and strong brine. The joyful news rang over the whole country. The partners at once sold out a third of their interest in the well for twelve thousand dollars, a large sum in those days, and were thus furnished with means to proceed with new wells. Settlers and capital flowed and the vast changes which are thus

in, from Baltimore and other quarters. Mr. Johnston gave to his sister, Mrs. Boggs, a piece of land upon the opposite side of the river. There her husband, Andrew Boggs, when the war was ended, laid out the town of Saltsburg. the name of which is the memorial of this event. The discovery of salt revolutionized the trade in it in the upper Ohio valley. Mr. Johnston afterwards presented his young nephew, who had been present while the first well was in progress, with a silver watch as an affectionate memento.

It is instructive to trace up to their sources, and out into their ramifications. the great movements by which Providence affects the destinies of nations. This successful boring for salt by William Johnston, stimulated by the war of 1812, though insignificant in itself as a national event, was the first step of discovery and mechanical discipline which in time brought forth the endeavor of Samuel M. Kier to utilize the petroleum which he skimmed from the salt-vats at Tarentum; and then the boring for the oil itself by E. L. Drake; and then the immense results of the commerce in petroleum to our country and all the nations of the world. From this source also came the manufacture of soda and other chemical salts at Natrona and other points, and the consequent importation of cryolite from Greenland, and the peculiar beneficial results of that trade in Greenland and in this country. Finally in the chain we see the utilization of the combustible natural gas, the opening of gas-wells,

already produced in manufactures, mining and methods of heating and illumination in cities and towns.

THE FIRST CANAL—WATER POWER—IRON HOOPS FOR COTTON BALES.

The state of Pennsylvania was the first to take an interest in the construction of canals. They were recommended by William Penn in 1690. A route for one to connect the Schuylkill and the Susquehanna rivers was surveved by the astronomer David Rittenhouse in 1762; and after the Revolutionary War, in 1791-2, a company, headed by him and Robert Morris, was organized with connections in view towards the western lakes and the Ohio river. Nearly half a million dollars was spent in work upon the Schuylkill; but the time had not yet come for the accomplishment of so extensive and great an enterprise.

At the beginning of the present century there arose an urgent necessity for the creation of facilities of travel and transportation between the seaboard and the vast and rich territories which lured immigration with a rapidly swelling volume westward. As early as 1802 congress in erecting the state of Ohio stipulated that five per cent. of the proceeds of the sale of the public lands within its boundaries should be devoted to "public roads leading from the navigable waters emptying into the Atlantic [ocean] to the Ohio [river], to the said state, and through the same;" in 1803 it apportioned three per cent. of that money to roads "within the state" and two per cent. to "roads leading from the

navigable waters of the Atlantic coast to its borders." In 1806 this last income was specifically granted to a national road to be constructed from Cumberland. Maryland, to the state of Ohio, with the consent of the intermediate states. Pennsylvania accepted the grant with the proviso that if practicable the road should pass through the towns of Uniontown and Washington. When the road was completed it was found that the Federal government had received a hundred and eighty-seven thousand dollars and expended nine times that amount, one million seven hundred and sixty-six thousand. The party spirit of the day compelled the states, or public corporations, to assume the prosecution of such enterprises. Ere long, Maryland, Virginia, New York, Pennsylvania and in time Ohio, embarked in them with great spirit. DeWitt Clinton and other statesmen aroused the country by their pleas. The Erie canal in New York, completed in 1825, and the progress of the Chesapeake & Ohio and other canals, threatened to deprive Pennsylvania, notwithstanding her prior efforts and superior position, of her share in the benefits of these westward movements of population and trade. Her legislature, after some years of perplexing discussions and explorations of routes and methods of communication, began in 1826 the construction of the main line of canal and railroad, in alternate parts, from Philadelphia to Pittsburgh. The first boat, upon a completed portion of the division of the canal from Johnstown, came into Pittsburgh November 10, 1830.

The western portion of the state was on account of its greater necessities even more active in the advocacy of these measures until their final accomplishment than the east. The leading newspaper of that section of country was the Pittsburgh Gazette, of which David and Matthew Maclean, after maintaining the Greensburg Gazette from 1811 till 1822, became in the latter year the intelligent and able editors. Among their counselors and correspondents were several who for various reasons were deeply interested in effecting these connections; conspicuously, Neville B. Craig, who in 1829 succeeded to the editorship of the paper, and General William Robinson, both of them eminently strong and practical men. Into this circle Dr. Speer, when he came to Pittsburgh in 1825, partly through his close relationship with the Macleans by marriage, readily fell; and he was soon enlisted in the furtherance of their cherished aims. He was specially commissioned by them to correspond with the Hon. James Buchanan, for the sake of his important influence in eastern Pennsylvania. These efforts were in the end fully successful; indeed the spirit of such improvements for a time ran wild with the people, and almost before they knew it the state was plunged forty millions of dollars in debt. The more far-sighted at Pittsburgh looked westward as well as eastward. Among the contributions of Dr. Speer to the press at that time was an article advocating the building of a dam upon the Ohio river a short distance below the cities of Pittsburgh and Allegheny,

so as to afford sufficient depth of water and extended wharfage in the Monongahela and Allegheny rivers, for the facilitation of the steam and other commerce—a measure which has been finally accomplished, with public rejoicings, within a year past.

Having obtained from the estate of his father, in 1829, the property commanding the water power of two of the most eligibly situated dams of the Pennsylvania canal, he formed a company which applied one of them to the manufacture of iron, though with more profit in the end to others than to himself. The suggestions of his connection with this manufacture prompted an incidental result of marked interest. The cultivation and trade in cotton had grown during each decade of this century until 1860 with a rapidity which far outstripped those of any other production of our country. The crop of four hundred thousand bales in the year 1820 had become above two million bales in 1840, and over five million bales in 1859. In our foreign commerce, our manufactures, even our politics, the South jubilantly proclaimed "Cotton is king." The slave states upon the seacoast and gulf produced it; those further northward were enriched by agriculture vital to it. Kentucky furnished a large share of the cordage and bagging required for the transportation of it; in 1850 a hundred and fifty establishments there manufactured two and a third million dollars worth of these materials. But about this time strange changes began to manifest themselves in the dominions, the armies and the

revenues of King Cotton. Among others it was discovered that the employment of hoop iron, instead of hemp rope, in baling, enabled shippers to compress the article to one-third of the former bulk, preserve its covering, keep it much cleaner, render it comparatively safe against fire and water, and reduce proportionately the expenses of freight and insurance. The active and comprehensive mind of Dr. Speer at once seized upon the importance of this new branch of manufactures. He invented a form of tie to secure the ends of the iron hoops, provided for the manufacture of ties and hoops, visited the principal cities of the South, established agencies, and aided no little in creating a southern sentiment and practical changes which have entirely revolutionized the old methods. The war swept the business from northern hands. But in 1870 Kentucky had only nine of the former manufacturing establishments and one-thirteenth of the business previously done by them. Now all the cotton of the South goes forth hooped with iron.

FIRST STEPS TOWARD RAILROADS.

It became evident to the people of the west, after a number of years of experiment, that canals, or canals interlinked with railroads, would not meet the requirements of the rapid growth of trade with the east. The Baltimore & Ohio railroad was completed to Cumberland, on the way toward Wheeling. Freight and passengers, even those between Philadelphia and Pittsburgh, preferred the more quick and easy transit. The

Pennsylvania canal and its intermediate bands of railroad were deserted. the eastern and middle portions of the state were bent upon its maintenance. It was clear to the people of the Pittsburgh region that immediate and effective means must be adopted to avert the almost total transfer of trade southward. beyond what they were already losing by the great increase of facilities now being opened up along the northern lakes. The first important result of the general discussion of the subject was the designation, at a public meeting in 1843presided over by the Hon. William Wilkins-of a "general railroad committee" of the citizens of Pittsburgh and Allegheny to take the matter in hand, and to use means to enlist the cooporation of the two cities and secure subscriptions towards the construction of a railroad to Connellsville and Cumberland. general committee appointed a special committee to prepare a suitable report and appeal, and placed Dr. Speer at the head of it. The paper is one of historical interest, from its relation to the first movement in behalf of railroads made in a region which is now the centre of so vast a system of railroad communications. We give a summary of it.

The report describes first the occasion, the "crisis in the history and in the prosperity of Pittsburgh," and the presence of "dangers which we had before scarcely considered as possible;" and the effects which the "diversion of trade and travel must have on all the important interests of our city." It has become necessary "to provide greater facilities for intercourse with the east during the many months of every year when our canals and rivers are frozen up." "We have been too much in the habit of relying on the natural advantages of our location"—especially the three great rivers; and with two canals and the

turnpikes and other roads, "it has been supposed that we might pause in the march of improvement and fold our arms in security. But not so; this is the age of wonderful and almost incredible improvements; and in nothing more wonderful than in the multiplication and perfection of facilities for traveling and intercommunication between different parts of the country and indeed of the world." "The mighty energies of steam are no longer confined to the water. It has become amphibious; it has bounded from the water to the land, and now traverses the different railroads of the country at the rate of from fifteen to thirty miles an hour." "Railroads have fairly proved, by the test of experiment, their superiority over every other mode of communication, in speed, in safety, and in the amount of profits on the cest of constructing them." "If we wish to retain the advantages of our position, to bring back the trade we have lost, and to fortify ourselves against all future assaults of rivalry from every other quarter, we must keep pace with the improvements of the times; we must form a railroad connection with the east, by which passengers can be carried at the rate of twenty, and freight at the rate of ten miles an hour; and that as promptly as the difficulties to be overcome will permit."

Statements are furnished in the report of the cost of railroads on the Atlantic coast; of the various advantages rendered to their districts; of the revenue which they yielded; and of the amounts of pecuniary aid given towards their construction by the states and their municipalities interested. Information is collected respecting the trade and resources of the regions reached by the Mississippi and Ohio rivers and their tributaries. "The value of tonnage passing to and from the west and south yearly" is estimated at "three hundred millions of dollars," while "the entire value of the foreign trade of the United States, exports and imports, in 1841," was but two hundred and fifty millions.

The local advantages are represented. The rails and other "iron necessary in the construction of the road," the locomotives, the cars and adjunct necessities will create numerous new forms of manufactures. The steamboat interests upon the rivers will be advanced. Real estate will increase in value. Every kind of ordinary employment will share in the prosperity imparted to business.

A concluding appeal to the councils of the two cities declares that the general financial condition of the country at the time justifies the undertaking of this enterprise. "Ruin and decay, desertion of population, and decrease in the value of property, must result" if now trade and communication between the east and west are fixed in other courses. "The magnitude of the interests at stake demands that the cities of Pittsburgh and Allegheny should afford liberal and efficient assistance." A "vigorous and united effort" should now be made by all classes to construct "a grand central route between the Atlantic and the west;" and this "is necessary to place Pittsburgh on a sure and solid footing of wealth and prosperity."

The effect of this able and earnest document, read by the general committee and by request of the councils first in Pittsburgh and then in Allegheny, circulated in a pamphlet and commented upon in the newspapers, was electric and decisive. The estimates were that the cost of fifty-eight miles of single track to Connellsville and two miles of turn-outs, at the rates of labor and materials then ruling, would amount to six hundred and twenty-one thousand dollars; and twenty-five miles more, to the Maryland line at Smithfield, to three hundred and thirty-five thousand dol-The councils of Pittsburgh promptly subscribed, of this less than a million called for, the sum of three hundred thousand dollars: those of Allegheny, one hundred thousand dollars. The remainder was soon taken or assured by business firms and individuals. In the general enthusiasm even laboring men and mechanics were glad to subscribe for a share or two of stock.

This was the beginning in western Pennsylvania of a public interest in railroads which, though baffled by political and other influences for a time, did not cease until, first, the Pennsylvania & Ohio railroad, begun in 1848, was opened to New Brighton in 1851; and till by successive steps the people of the state were aroused to the necessity of a continuous railroad connection from Philadelphia to Pittsburgh, and the first through train of cars triumphantly entered the western terminus in February, 1854.

FIRST CEMETERY WEST OF THE ATLAN-TIC COAST.

The divine chastisements of our erring race have been the manifest source of many of the best blessings bestowed upon it. Among the remarkable benefits which followed the great plague and the great fire of London, the strange companion disasters of 1665 and '66, was the reconstruction of the plan, and the immense improvement in the architecture and sanitary condition, of that metropolis, under the superintendence of Sir Christopher Wren. Among the matters in which there was now opportunity for reformation, that great architect declared that the time apparently had come when "all burials in churches might be disallowed." first. as being "unwholesome;" and, next, as injurious to the church edifices and property-"the pavements can never be kept even, nor the pews upright." "Burials," he said, "should be in cemeteries seated in the outskirts of the town." And he made several excellent practical suggestions as to the laying out and management of such places. Another illustration of the same principle may be noticed in France. The tremendous massacres of the French Revolution, and the horrible and disgusting scenes which resulted from the

difficulty of disposing of the numberless corrupting corpses, prompted in the minds of the first Napoleon and others the establishment of extensive places of interment outside of the cities. One of these, the Pére la Chaise cemetery, was opened in the first year of the empire, 1804; it embraces a hundred acres of the undulating hills on the northwestern side of Paris, and has become one of the most beautiful and renowned places of this kind in the world.

In several of the English cities there had long existed a most urgent necessity for large suburban cemeteries. The "burying-grounds" of the London churches amounted in all to but about two hundred acres, into which were yearly packed fifty thousand dead; they were in "layer upon layer," several deep, in various stages of decay. The ground of some such spots was raised considerably above the adjacent level; grass and flowers would not grow upon it; the atmosphere of the narrow streets was rendered foul and poisonous with mephitic gases; the wells were polluted and bred disease; diarrhœa, dysentery, typhus and other pestilential fevers raged in their vicinity; the graveyard of St. Margaret's church filled even the House of Commons with its stench. When, in 1829-31, the Asiatic cholera slowly crossed the continent westward through Russia, Germany and France, the terror of its approach aroused preparations to guard against it, and for the relief of the smitten and the disposal of the dead. Committees of the House of Commons published reports compiled from the testimony of medical and other scientific

men. Among other important objects accomplished was the manifestation of the necessity of "extra-mural" cemeteries for the sepulture of the vast number who annually died in the great cities. The certainty of the communication of the pestilence to our continent excited the same inquiries and led to the adoption here of kindred measures. We date from that period the origin of many sanitary and humanitarian advances in this country.

The designation of Dr. Speer by the councils of Pittsburgh to be chairman of a medical committee to examine this exciting subject, and publish information useful to the people, led him to inquire thoroughly into what had been written upon it on the other side of the ocean and to consider its various practical relations. In respect to the burial of the dead especially there were some events connected with his own practice which impressed him deeply with the public necessity for extensive places of interment suitable to all conditions of society and for all emergencies, outside of the cities, and arranged and conducted on very different principles from the church "graveyards" and "burying-grounds" then in use, some of which even in Pittsburgh had become overpacked and repulsive.

Indeed the time had come for giving form and substance to more advanced ideas in respect to provision for the beloved dead. Heathenism counts the material body evil, unclean, hateful; to be macerated in life by penance, to be burned at death, or destroyed and annihilated in some other way; and modern

atheism, or indifferentism, tend in the same direction. But Christianity loves and honors the body as the divine receptacle, agent and expression, of the spirit made in the image of God; as the tenement which the Son of God on earth and in heaven has occupied and dignified; and as the very substance which is to be recollected, translated, glorified, fitted for eternal mansions and angelic companionship on high. The substance for such transformation, the material of such hope, must be cherished as incomparably precious. It should possess a city and an architecture and surroundings its own and worthy of it. These should be such as to move and influence the heart and the mind, the moral and the social impulses, the tastes and the character, of families and communities. The cemetery should be a powerful auxiliary of education and religion.

It was fitting that the first cemetery of this country should be planted under the influence of men like Amos and Abbott Lawrence and Joseph Story, and that it should bear the name of "Auburn," made sweet and sacred to us by Goldsmith's poem of "The Deserted Village." This Boston cemetery was opened in 1831. "Laurel Hill," at Philadelphia, came next; its charter dates from 1836. "Greenwood," for New York and Brooklyn, followed; chartered in 1838, opened in 1840. Next to these in order of time stands "Allegheny Cemetery," on the shores of the beautiful river of that name, for the cities of Pittsburgh and Allegheny : the first in the United States outside of three leading cities, the first west of the

Alleghany mountains, and one which has well maintained its position of honor in other respects besides priority of time.

With two gentlemen of Pittsburgh Dr. Speer held conferences upon the theme of a "rural cemetery," when the subject began to be a hope and purpose in his mind. One was Stephen Colwell, then a resident of the city, a man of both American and European reputation as a political economist and philanthropist, one of the commission-David A. Wells being another of the three appointed-to which after the Rebellion congress entrusted the immense task of reorganizing the financial system of the government; one of the most accomplished and able men of the nation. The other was John Chislett, an architect, born at Glastonbury, England, who, after practising his profession in Bath and in London, came to this country in 1832. In Pittsburgh, the court-house on Grant street, the Third Presbyterian church, and other public and many private edifices, weré constructed upon his plans. With him, indeed, began the advance towards scientific architecture in the city. He was a man of genius in different lines of the fine arts. When the Allegheny cemetery was incorporated as an institution he was made its superintendent, and remained so, his taste and judgment and industry conspicuous in all its plan and ornamentation and management, until his death in 1869.

It was difficult to give material shape to the general purpose in a case as to which almost no precedent yet existed

to guide in respect to vital questions of organization, extent, cost, relations to communities and management. When the large and vigorous Third Presbyterian church was formed in 1833, while the cholera yet lingered in the community and the need of a new burial place was felt, the way seemed to open towards a practical effort, and different spots in the vicinity of the city containing a dozen of acres were examined. But during the next spring, in April and May, Dr. Speer visited Mt. Auburn cemetery, near Boston, the only one yet commenced in this country, and procured information as to its methods and success which satisfied him, and enabled him to exhibit to others, that a scheme much more extensive than at first conceived was possible of accomplishment. From that time the establishment of a noble cemetery-adapted in extent and in the nature of the soil, and in convenience to the two large and growing cities and the neighboring populations -situated in a place least liable to invasions of highways and of noisy industries-rich in diversities of surface, and in commanding and beautiful prospects, and in the original forest trees and vegetation-became, amidst numerous other employments, the most absorbing and congenial aim of his life. Several summers were occupied in explorations, as opportunities occurred in connection with professional duties, of all the promising sites up and down the three rivers, within several miles of the cities, and in inquiries as to the tenure of properties and other needful preliminaries. And then leading members

bodies, the newspaper press and representative men in the different profes sions, were to be informed and interested. Thus, as Mr. Howe said in his report as president of the board of managers in 1848, referring to "an attempt made as early as 1834 by Dr. James R. Speer, Stephen Colwell and John Chislett, Esqrs., to establish a rural cemetery in this neighborhood "though this "grateful enterprise" "had been a favorite subject with several of our leading citizens, it was not till the fall of 1843 that it arrested any considerable degree of the public attention."

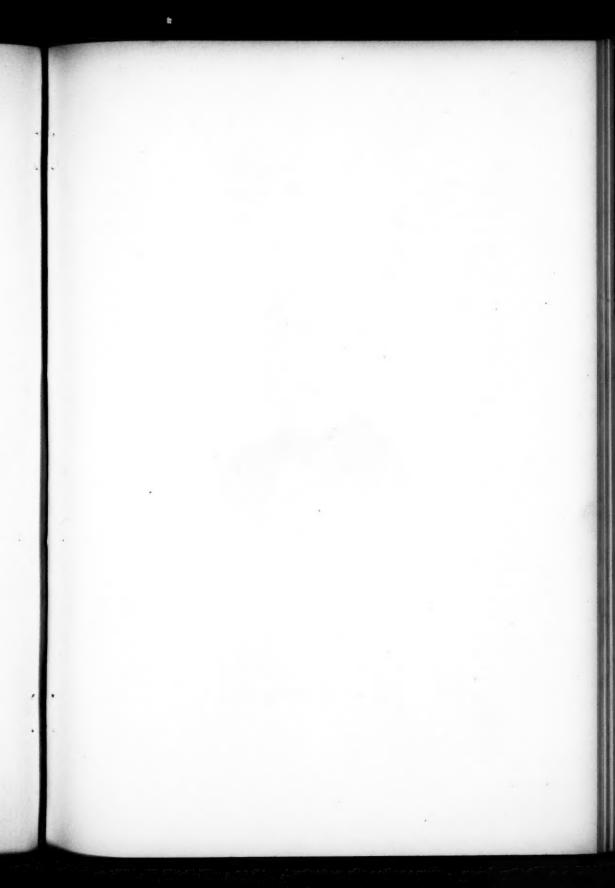
Among those who early and earnestly enlisted in the movement towards a general rural cemetery for the region of Pittsburgh was Richard Biddle, the great lawyer, the peer of his brother, the famous Nicholas Biddle, the antagonist of Jackson in the mortal conflict between the Federal executive and the United States bank. He shaped its relations to the local and state laws and its act of incorporation by the legislature, and was made first president of its board of managers in 1844. Another was Thomas M. Howe, annually elected its president from 1846, for thirty years; a man of rare intellectual ability, and of varied and abundant success in financial enterprises; one counted by his fellow-citizens worthy of the governorship of the state, or a seat in the Federal cabinet, and still more honored for his elevated and beautiful moral and Christian character. To others, among the

of religious congregations and public ingly and efficiently have taken part in promoting this enterprise, this brief sketch does not allow justice to be done. Suffice it to say, that never to any benevolent movement has there been gathered a nobler band of men, representing high intellect and attainments in the several professions, eminent success in the great interests of manufactures and railroads which have given to Pennsylvania and Pittsburgh commercial influence commensurate with the nation, and moral worth which has spread charities and other benefits over this and into other lands. To a succession of such men have been committed the financial and other burdens of carrying forward the work initiated fifty-two, and formally inaugurated forty-two years ago. And nobly have they fulfilled their trust; the place stands one of the first of its kind in the country.

The Allegheny cemetery was fully brought before the people by several public meetings and articles in the newspapers early in 1844; was at once incorporated by the legislature; and operations were immediately commenced under the direction of a band of seven managers annually elected by a body of about forty corporators. A hundred acres of land, which previous explorations had shown to combine above any other in the whole region all the different requisites for the great design, was purchased from George A. Bayard, Esq., for fifty thousand dollars. The plan, surveys, road-making, and other preparations were actively pushed dead and the living, of those who lov- forward; and it was dedicated by rereligious ceremonies in April, 1845. Already, its first interment, the ground had been hallowed by depositing in it a lovely daughter of Mr. Bayard, the young wife of James A. Briggs, Esq., of Cleveland, and soon afterwards an infant son of Dr. Speer.

To-day the cemetery by the gradual addition of suitable grounds and the perfecting of its boundaries has acquired two hundred and seventy acres of land, at a cost of over five hundred thousand dollars. It has sold lots to the amount of over a million dollars, and retains in its hands perhaps half of the surface for the wants of the long future. Probably a million and a half has been spent by lot-holders in the expenses of enclosures, tombs, and ornamentation and care. A large nursery department furnishes numerous shrubs and flowers appropriate to the designs of the spot. A fine edifice of stone for offices and a gateway, a receiving vault, and other buildings have been erected; and a chapel worthy of the place has been promised as a monumental gift by a generous donor. A reserved fund for improvements and emergencies amounts to a third of a million of dollars. The whole has been thoroughly secured by its charter and by obtaining the insertion of a clause into the constitution of the state, against taxation and similar dangers of perversion from the owners of lots; and no public road or street can be laid out through the grounds. It was provided from the very outset that all this should be in its nature a work of benevolence, without pecuniary, sectarian or personal advantage in view; and this spirit has characterized the relations of the cemetery to all classes of people, the poor included. Into this "city of the dead" there has been gathered to their last sleep a population of twenty-five thousand, of every age and condition, guarded as far as human kindness and foresight can, against all intrusion and disturbance, until the day of universal waking.

It does not come within the design of this historical paper to notice the personal events of the life which we have sketched as to its intimate relation to some of the most important and beneficent interests of the valley of the Ohio. Suffice it to say that, commenced at Chambersburgh, Pennsylvania, several of its infantile years were spent under the care of an honored father who, as a Presbyterian minister, came to plant the first Christian church at Chillicothe, which was soon after made the capital of the Northwest Territory; and who was the chaplain there of the legislature of the Territory. Its youth was spent at Greensburg, the seat of Westmoreland, the original county of the western portion of the state of Pennsyl-We have only alluded to Dr. vania. Speer's relations to secular education, in connection with the Western university, of which for fifty years he has been a trustee; he also for three-fourths of that time occupied a similar position as to the Western Theological seminary. His domestic relations have been peculiarly happy in many ways. It is a singularly interesting fact that a life so useful should have been spared so long, and with it that of the wife of his youth. In the sixty-fifth year of their married life they exhibit the blessings bestowed, even to children and children's children, upon those who are faithful to their duties to God and to man.





Magnatuse or Western History

of Burnham

THOMAS BURNHAM.

THOMAS BURNHAM may well be regarded as one of the pioneer business men of Cleveland. He came here over half a century ago, when Cleveland had but seventeen hundred citizens, before a railroad had been built in Ohio, and when the young west was only beginning to gain a hint of the greatness of its future. From that day to this he has given his time, ability, strength and capital to the upbuilding and advancing of the city's business interests, and has in many ways been a useful man. He has seen many wonderful changes in this half century of time, and in putting on record some of the leading points of his life, we furnish a glimpse of the advancement of Cleveland as well.

Mr. Burnham was born in Moreau. Saratoga county, New York, on June 18, 1808. His ancestors were of English origin, the founder of the family coming from England in 1635, and settling in Massachusetts. His grandfather was a soldier in the French and Indian, and Revolutionary wars, and was a captain at Bunker Hill-land given him for such services by the government being still in the possession of his descendants, near Lake George, New York. His father was a farmer in moderate circumstances, having a family of nine children, three sons and six daughters. The subject of this sketch, who was the seventh child, spent his

minority in school and on the farm. On completing his majority, his first year was passed in the service of a neighbor, and for two years following that he was master of a freight boat running from Whitehall to Albany, on the Champlain canal. In 1833 he concluded to abandon boat life, and on the twenty-ninth of October of that year he was married, and on the same day, with his bride, one hundred and fifty dollars in his pocket, and an inexhaustible amount of courage in his heart, set out to try his fortune in the then far west of Ohio. He had been on a visit to Cleveland in the spring before, and had fixed upon it as his objective point. The young couple, with a happy party of friends, were conveyed by team from Glens Falls, where the wedding had occurred, to Saratoga, where dinner was had. Then bidding their companions farewell, they took the cars for Schenectady. Railroading then was a primitive thing, and the line on which they rode possessed cars fashioned like stage coaches. running on a strap rail, and propelled by three horses driven tandem. The Schenectady and Albany line was at that time employing steam power, but the new motor had not found its way on the smaller roads.

At Schenectady, Mr. and Mrs. Burnham took passage on a boat on the Eric canal, and proceeded to Buffalo, where

they embarked on the steamer Pennsylvania for Cleveland. The boat was a slow one, her fuel was poor and green wood, and as she stopped in every port along the way to receive and discharge freight, four days and four nights were consumed in the passage. This city was reached in November. Mr. Burnham looked about for employment, and as nothing better presented itself, took charge of a school on the west side of the river, in what was then known as Brooklyn township, Ohio City not having been created. The school building was located on the corner of Washington and Pearl streets, and was long since torn down. Mr. Burnham taught here for three months, and among his pupils were A. J. Wenham, Henry and Mark S. Castle, the late Josiah Barber and other afterwards well-known citizens. In the summer following an acquaintance from the east named Hiram Morgan arrived in Cleveland, and in company with him Mr. Burnham leased the Burton House, a hotel that then stood on the corner of Pearl and Detroit streets, where the offices of the Woodland & West Side street railroad are now located. In the spring Mr. Burnham entered the service of the Troy & Erie line, a company doing a large business on the Ohio canal. Those who know the Ohio canal of to-day only as a sluggish and narrow highway for the hauling of coal from the Stark and Tuscarawas region, can hardly appreciate the great factor it was in the commercial life of Cleveland and Ohio in those days when the railroads were unthought of, or at best were regarded

as a cumbersome connection between various water-ways. The Ohio canal had been welcomed as a great artery of travel and trade to this city, as it well proved itself to be, and its opening was celebrated with great pomp and glory. In 1844, after having acquired an interest in the company by which he had been employed, he decided to turn his attention to wider enterprises and pursuits more fitted to his business turn of mind and matured powers. cordingly went into the grain business, and took control of an elevator on the river above the present viaduct. 1851, as an advance step in his chosen business, he purchased the well-known Erie elevator on the corner of Main and West River streets, on the west side of the river, one of the largest then in Cleveland. Mr. Burnham gave his business close thought and faithful attention, and to his enterprise was due a large part of the growth of Cleveland as a grain receiving point, which was one of the notable features of those days. Mr. Burnham continued in the elevator business, in connection with several partners at times, and with his son, Thomas W. Burnham, until 1871, when he retired from the active control of any distinct line of business operation, although connected through his capital and supervision with many of Cleveland's most active enterprises, from that day to this. He was one of the chief founders of the malleable iron business west of the Alleghany mountains, and is one of its chief promoters to-day. He went into it when it was an experiment, and required courage and

faith for the investment of capital therein. These he had in abundance, and the results have been their justification. When a man who was acquainted with the business was brought on to Cleveland, and the Malleable Iron works of this city were started in a small and humble way in the Fifteenth ward, Mr. Burnham looked carefully into the whole question, and as a result became a large stockholder in the Cleveland Malleable Iron company, and for five years was its president. He was one of the originators of the Chicago Malleable Iron company, and is still a large stockholder. It is the largest establishment of its kind in the west, that of Cleveland coming next. When the business was first started here, thirty tons a month comprised the total production, while now the Chicago works produce eight hundred and fifty tons during the same period of time. Burnham is also a large stockholder of the Cleveland Burial Case company, one of the largest manufactories of that character in the county, is a director therein, and was its president for a time. He is also a stockholder and director in the Whipple Manufacturing company. When in business on the river, he was an earnest and active member of the Cleveland Board of Trade, and in many ways, through the use of his capital and the giving of his personal attention, has aided in the upbuilding and advancing of Cleveland's industrial and commercial interests.

On the creation of Ohio City, of which section Mr. Burnham was then a resident, he became one of the active

and most public-spirited of her citizens, doing all that lay in his power for the advancement of the new corporation. He served for a number of years in her city council, and became her mayor in 1849, and was reëlected to a second term. While he was in the council the question came up as to whether Ohio City should or should not issue bonds in aid of the road afterwards known as the Cleveland & Toledo railroad. It was decided to issue city bonds to the amount of one hundred thousand dollars, and Mr. Burnham was appointed one of a commission of three to carry the decision into effect. The bonds were accordingly issued, and proved to be a paying investment, as the city received back its money in full and some eighteen or twenty thousand dollars in interest, which money was used in the erection of the old West Side high school building, on State and Church

As the foregoing shows, Mr. Burnham has been so busy with the various commercial and manufacturing interests he has had in hand that he has had time for little else. Although a firm Republican, and always a close and interested observer of public events, he has had neither time nor desire for a practical experience in politics, and the only offices he has consented to hold have been those where his knowledge and business experience could be directly applied to the administration of local affairs. He has always been a business man in the fullest and broadest meaning of the term, and has ever had enough in hand to keep him closely en-

gaged. Success has crowned his efforts to a large degree, and in these latter years he is able to take life with any degree of ease and rest he may desire. He has traveled a great deal, in this country and in Europe as well. That he stands high in the business world has been pretty clearly shown in the above recital of his labors. He is remarkable for his ability in the conduct of manufacturing and industrial enterprises, and has ever borne the highest reputation for personal and business integrity. Careful, far-seeing, and conservative when the chances are uncertain, he possesses at the same time, the courage to take large risks when his judgment so advises, and the tenacity to hold on when once committed to an enterprise. That he is a just and careful man is evinced in this remarkable fact-that in forty years of. active business life, in connection with

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large establishments and in dealing with many thousands of people, he has had no litigation, or so little as to be practically none at all. To deal not only justly with all men, but to so emphasize that dealing as to have no controversies. shows not only an unusual aptitude for dealing with men, but a good judgment and a high integrity of character. Of a social, generous nature personally, Mr. Burnham makes a good neighbor, a model citizen, a firm friend where he gives his friendship, and a useful man in every meaning of the term. He is one of that class of men who by years of fair and manly dealing, and of enterprise that is based on honesty and has no element of trickery within it, has done so much in laying the foundations of Cleveland's prosperity, and giving her the fair name she possesses to-day.

DAVID W. CROSS.

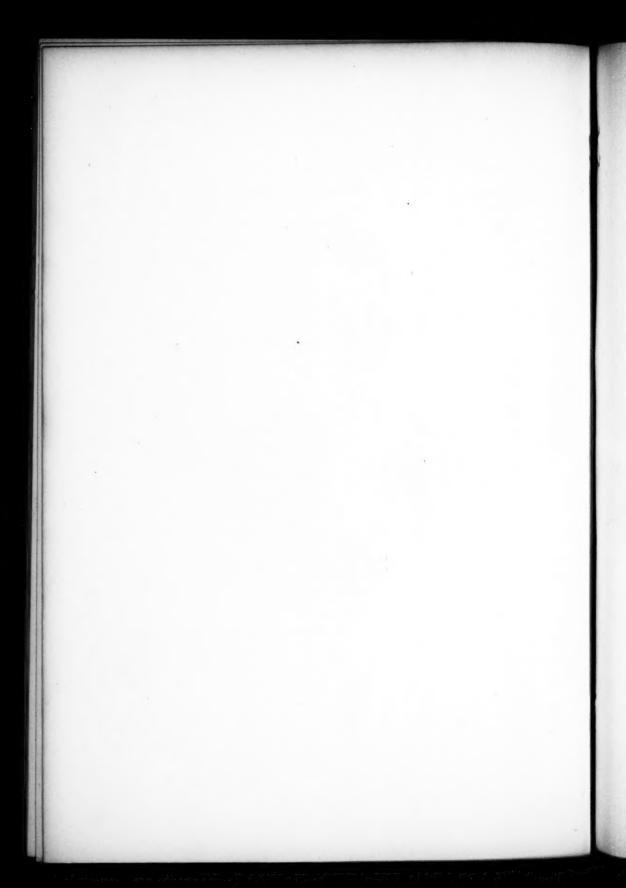
DAVID W. Cross for almost fifty years has been so thoroughly identified with the interests of Cleveland as a public official, lawyer, capitalist and man of letters, that in going over his life one almost outlines the history of the city during the period named. He is a modest, quiet gentleman who, in his advanced years, is able to enjoy in peace and plenty the ample fruits of a life of active industry. His life was commenced amid pleasant influences, and he has shown ample evidences of the

culture that had a beginning in his early days. He was born in Richland, now Pulaski township, Oswego county, New York, on November 17, 1814. He was educated at Hamilton seminary, and soon after leaving there came direct to Cleveland in 1836, where he became a student in the law office of Payne & Willson, the partners being Senator Henry B. Payne and the late Judge H. V. Willson. In the beginning of 1837 Mr. Cross was appointed deputy collector of the Cleveland port, under Hon.



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Samuel Starkweather, collector, but continued in the study of law and was admitted to practice in the State and United States courts. For eighteen years he remained in the service of the government, instituting many reforms in the methods and ways of business in the customs service, and doing so much work that on one occasion he received a check for five hundred dollars from the secretary of the treasury. In 1844 he entered actively into the practice of his chosen profession, forming a partnership with Robert Parks, under the firm name of Cross & Parks, which so remained until the death of Mr. Parks in 1860. In 1848 Mr. Cross was elected township clerk by the largest majority ever given to any candidate for office up to that time, and doing what no one ever thinks of accomplishing in these days-carrying every ward in the city. In 1849 he was chosen a member of the city council. In 1855 he entered upon an enterprise that had much to do with the growth of manufacturing in Cleveland, as the full supply of cheap coal that was offered at an opportune time was one of the great factors in our city's advancement. In company with Oliver H. Perry he purchased one hundred and fifty acres of land at Mineral Ridge, and leased much more, and the first Mineral Ridge coal ever used here was brought by the firm of Perry, Cross & Company, over the Pennsylvania and Ohio canal. In 1859 the late ex-Mayor Nathan P. Payne purchased Mr. Perry's interest, and the firm name was changed to D. W. Cross & Company. In 1861 the addition of Isaac Newton to the

firm caused its name to be again changed to Cross, Payne & Company. discovered and developed the Summit bank coal deposit, and connected their mines by a three-mile railroad, which they built to the canal at Middlebury. They repaired the Feeder canal from Middlebury to Akron, built extensive docks and shutes capable of holding four to five hundred tons of coal and employed one hundred and fifty men of more. They purchased or leased new lands as occasion offered. and became one of the live and vital commercial forces of northern Ohio. In 1867 Mr. Cross in a measure retired from the coal business, in person, while still retaining his financial interests. He continued active in other lines of business, and aided in the building up of many of Cleveland's industries. He was elected president of the Winslow Car Roofing company, of the Cleveland Steam Gauge company, was a director in the Amherst Stone company, and connected with other important enterprises.

While thus busy, in all these years, Mr. Cross did not neglect life in other and less exciting directions. He was always a lover of the rod and gun, and has done as much as any man in the land for the placing of sportsmanship on a high and manly level. From 1838 and through thirteen consecutive seasons he gave special vacations to the pursuit of deer and other game in the northwestern part of the state, and he had the honor of killing the last deer in Cuyahoga county, in the vicinity of Lake Abram, in 1856. Mr. Cross has from the begin-

ning been one of the most earnest and active members of the Winous Point Shooting club, and was the founder and is the president of the Oneida club of New York state. In company with Oliver H. Perry he was the first to discover trout among the rocks of Lake Superior. The result of Mr. Cross' experiences and experiments, and the sum of his long and skilled observation, can be found in that admirable work 'Fifty Years with the Gun and Rod,' which he published a few years ago. It is no mere record of personal adventure, but an able and scientific work, and is such as could only have been produced by one who combined scientific and scholarly attainments with a long personal experience in the field and on the stream. He gives the velocity of the different kinds of shot, the angles, the elevations, and the power of the different weapons now in use. He tells all about birds that can be known, and covers his special field better than it was ever covered before. Mr. Cross has also been for years a contributor to Forest and Stream of New York, the American Field of Chicago, the American Angler

of New York, and other sporting papers of that grade. He has also done much for fish culture, and was one of the first to successfully plant the California trout in Ohio waters. In 1881 he purchased three hundred acres of land in Oswego county, New York, where he has planted up to this time in the waters running through it two hundred and fifty thousand California mountain trout. His experiments there and at other places, in this line, have been crowned with success.

Mr. Cross has been connected with many minor organizations in the public and political life of Cleveland, but space will not allow a special mention of each. In 1840 he was married to Lorain P. Lee of Bloomfield, New York, who died January 23, 1875, after they had spent a married life of unusual happiness and of mutual love and esteem. One son was born to this union. Mr. Cross is a genial and highly cultured man, and although not now active in business or public affairs, watches the progress of events with a keen eye, and keeps up with the news and literature of the day.

HENRY JAMES SEYMOUR.

GEOGRAPHY AND EARLY AMERICAN HISTORY.

CAPE RACE, at the southeast extremity of the Island of Newfoundland, is the farthest projection of North America into the waters of the Atlantic ocean. From this cape one coast line runs northwest until it is lost amid the islands of the Arctic archipelago. From the same cape a second line runs southwest to the end of the peninsula of Florida, where it is deflected north and west, south and east, until it returns almost to Florida again, and holds in its elliptical embrace the Gulf of Mexico. Back of Newfoundland is the Gulf of St. Lawrence, setting deeply into the land and receiving the river of the same name, which is the outlet of the five great lakes lying in the heart of the continent. From the shore of the southern gulf to the shore of the northern, running parallel with the coast line, and only a few hundred miles from it, extends the Appalachian mountains, from three thousand five hundred to seven thousand feet in height, save in one point where they are pierced by a river valley that we shall soon have occasion to mention more in particular. North of the Gulf of Mexico, west of the Appalachian mountains, and south of the lakes, lies the valley of the Mississippi, spreading to the Rocky mountains and to the springs of the rivers that flow into Hudson bay. This valley, which is in truth a vast plain one million square miles in extent, is coursed by a myriad of rivers-some small and some large,

but all of them sluggish-and presents few elevations of surface that attract the attention of the geographer. The waters of Lake Michigan once flowed to the Gulf of Mexico; geologists still point out its ancient outlet; and the sewage of the city of Chicago, by the aid of a simple pump, is made to flow that way to-day. Moreover, a rise of a few hundred feet in the level of Lake Erie would carry its surplus waters over the waterparting into the streams that flow into the Ohio. All these facts are plain and familiar, and possibly that is why we so rarely think of their prodigious influence on the course of American history. We shall note a few of the larger consequences that flowed from them in the period of American discovery and colonization.

For more than two hundred years from its discovery, North America had no independent life and history. It was a field of European contention, ambition and endeavor. Three great nations played each prominent parts in the drama—Spain, England and France.

Spain first explored the southern gulf. Cabeza de Vaca found one mouth of the Mississippi in 1528, but did not find the main river. De Soto discovered the river, in parallel thirty-five, in 1541, and the next year was buried at dead of night in its waters. In the language of Bancroft, "The wanderer had crossed a large part of the continent in search of gold, and found nothing so remarka-

ble as his burial place." De Soto's surviving companions descended the river to the gulf; but this Spanish discovery in no important sense made known the Mississippi to the world. Holding the shore line from Florida to Yucatan, Spain had the finest opportunity to explore and possess the Mississippi. But so fixed was her attention on the mines of Mexico and South America, that her gallions plowed the waters of the gulf for one hundred and fifty years, ignorant or regardless of the fact that they were crossing and recrossing before an open portal that would admit them to the richest valley in the world.

England sooner or later got possession of the whole coast from Acadia to Flor-Her colonists, as they ascended the rivers that come down to the sea, soon found themselves confronted by the Appalachian mountain-wall, and their progress to the interior arrested. Accustomed to pass and repass these mountains in a few hours' time at a dozen points, it is difficult for us to conceive how, at that day, they at once impressed the imaginations of men and retarded the spread of English settlements. The Indians called the Alleghanies the "Endless Mountains." On a map of Maryland published in 1670, the Alleghanies are represented above the Cumberlands, and this description of them is given:

"These mighty high and great Mountaines trenching N. E. and S. W., and W. S. W. is supposed to be the very middle Ridg of Northern America and the only Naturall Cause of the fierceness and Exteame Stormy Cold Winds that comes N. W. from thence all over this Continent and makes Frost."

Five rivers cut through these mountains—the Hudson, the Delaware, the

Susquehanna, the Potomac and the James; but only one of them offers an easy and natural passage from the sea to the Mississippi valley. By the Hudson and its principal tributary, and the streams flowing to the lakes, whose sources are intertwined with those of the Mohawk, and are separated from them by short and easy portages, the explorer and pioneer could readily have reached the lakes but for one obstacle. Right across the path was planted the most powerful Indian confederacy that ever existed within our country, so far as we know-the dreaded Iroquois of history and legend, who blocked the Englishman's way to the west quite as effectually as the mountains. Hence Englishmen had no part or lot in the exploration and discovery of the Great West. It is indeed said that one Colonel Wood found a branch of the Mississippi in 1654, that one Captain Bolton reached the great river itself in 1670, that a party of Virginians was at the falls of the Kanawha in 1671, that some English traders visited Mackinaw in 1685 or 1686; indeed, even wilder tales of English adventure are told; but most of these stories lack authority, and none of them affected the course of history in the smallest degree. In fact, it was not until the middle of the next century, in the day of Washington, that Englishmen, in a way to leave a mark in history, passed the "Endless Mountains," and found the interior.

The Gulf and River St. Lawrence fell to France, and this great natural waterway gave her an immediate entrance to the lakes and the heart of the con-

tinent. Having gained the southern Indians, living at the head of Green bay. shore of Lake Ontario, her explorers had accomplished two things-they had turned the left flank of the Appalachian mountains, and gained the edge of that vast plain which stretches away to the Ohio and the Mississippi, the Arkansas and the River of Palms, the Missouri and the Yellowstone. Accordingly, the glory of finding the Great West, and of making it known to the world, belongs wholly to the French. James Cartier discovered the St. Lawrence in 1534, and the next year he ascended the river and anchored under the rock of Quebec. But Samuel Champlain is the father of Canada. Champlain founded Quebec in 1608, and discovered the lake that bears his name in 1609. In 1613 he ascended the Ottawa to Lake Coulange, and two years later, in company with Father Le Caron, reached Lake Huron, which was the first of the great lakes seen by a white man. On his way back, Champlain discovered Lake Ontario. This was five years before the foot of the Pilgrim touched Plymouth Rock. In 1641 Fathers Raymbault and Jogues ascended the river St. Marie, and at the Sault preached the Gospel to two thousand Indians, who gathered to hear them. In 1659-60, Catholic missions were planted on the southern shore of Lake Superior. In 1668, Father Marquette planted a permanent mission at Sault St. Marie, the oldest town in Michigan-fourteen years older than Philadelphia, and one hundred and twenty years older than Marietta, Ohio. In 1639, however, Jean Nicollet, a daring explorer, had visited the Winnebago

By the middle of the seventeenth century four of the great lakes had been visited by the French, and in this order: Huron, Ontario, Michigan and Superior. But what of our own Lake Erie all this time? This lake was known to the French by report from about 1640; but of white men, Joliet, one of the most daring of the French explorers, was the first to navigate its waters. Returning from Lake Superior in 1669, where he had been sent in search of copper, he descended Lake Huron, passed through the straits to Lake Erie, and then coasted the north shore of the lake to the eastward. In 1670, some Sulpitian priests ascended the lake, passed the straits in the opposite direction, and made their way to Mackinaw. Accordingly it will be seen that from 1615 to 1670 the French were pushing their discoveries in the upper lakes, but made no use of Lake Erie in reaching them. The reason is two-fold. Champlain and Le Caron found Lake Huron by the way of the Ottawa, French river and Lake Nipissing, and thus set the direction of northwestern travel. Then the dreaded Iroquois long barred the portal of the Niagara to the hated Frenchman. Had it not been for the Ottawa, discovery in the northwest would have been delayed for many These facts also explain why the site of Detroit, then, as now, one of the most admirable on the lakes, was not discovered until 1669, and not occupied until 1701; and even then, Cadillac, who began the settlement, came by the Ottawa and Lake Huron.

But geography did more for the French than simply enable them easily to reach the upper lakes. By the way of the easy portages at once separating and connecting the streams flowing north to the lakes and the streams flowing south to the Mississippi, they gained ready access to the whole interior. A glance at the map shows how numerous these portages are, extending from New York to Minnesota. La Salle discovered the Ohio in 1670 (or near that time). Ioliet and Marquette, crossing from the Fox to the Wisconsin river, descended the Mississippi two-thirds of the way to the gulf in 1673. La Salle, crossing from the head of Lake Michigan by the Illinois to the Mississippi, descended the great river to the gulf in 1682 -the very year that Penn founded Philadelphia. To follow the French in their discoveries is here impossible and unnecessary; it suffices to say that, before the English had really scaled the Alleghanies, they had crossed and recrossed, threaded and rethreaded the valley of the Mississippi even to the foot hills of the Rocky mountains.

That the Mississippi valley was opened to the eyes of the world by a voyageur who came overland from Canada, and not by a voyager who plowed through the Atlantic and Gulf of Mexico from Spain, is a momentous fact. The first Louisiana embraced the whole of the Mississippi valley; this vast expanse and Canada made up New France; and how the two blended and supplemented each other in a geographical sense is sufficiently clear. The king of England claimed all territory back of his American colonies to the South Sea; he bounded some of these colonies north

and south by lines running from ocean to ocean; but the French gained his rear, took possession of the "back country," and closed the western doors to the king's subjects. The treasure that was expended and the blood that was shed to burst open these doors in the middle of the last century, has been written by Mr. Parkman in books

of engaging history.

The explanation of these great results is not wholly due to geography. The temper, culture and civilization of the French and English colonists respectively had much to do with the matter. The French took readily to the woods and to the Indians; their traders were intent on furs, their explorers on discovery, their missionaries on souls. The English were industrial, commercial and political; they cared for agriculture, trade and politics, and did not take kindly to the Indians. As a result, while Canada languished, thirteen English states grew up on the Atlantic slope, moulded on the Saxon pattern, and became populous, rich and strong. In 1750 there was more real civilizationmore seeds of things-in the town of Boston than in all New France. In time these compact and vigorous states offered effective resistance to Great Britain. It is plain that, had the English colonists spread themselves out over half a continent, hunted beaver and trafficked with the Indians after the manner of the French, independence would have been postponed many years and possibly forever. We owe a vast debt to the inherited character of those Englishmen who came to America in the first half of the seventeenth century, and no small debt to the Appalachian mountain-wall that confined them to the narrow Atlantic slope until, by reason of compression, they were gotten ready, first to enter the west in force, and then to extort their independence from England.

B. A. HINSDALE.

EDITORIAL NOTES.

MUCH has been written about the first newspaper published in the United States, but it may not be generally known that what is now the Dominion of Canada can boast of having had one in circulation more than one hundred and thirty years ago. This was the Halifax Gazette, the first number of which was issued on the twenty-third of March, 1752. It was printed by John Bushnell, at the printing office in Grafton street. The paper was about ten by fifteen inches in size, printed in open leaf of two pages, with two broad columns to a page.

IT was not until after the close of the Revolution that there was a newspaper published west of the Alleghanies. Whatever information was put in print concerning affairs "upon the western waters" during that struggle was mostly obtained from occasional correspondents who were living beyond the mountains, or from letters written to friends in the east by backwoodsmen. Very many events of the greatest importance to the borderers were, as a consequence, left unrecorded. Frequently, therefore, it happens that in investigating matters of historical import reliance must be placed upon tradition, which, in its nature, is often precarious. For example, take the expedition of Colonel John Bowman from Kentucky, in 1779, against Chillicothe, a Shawanese town, about three miles north of the present town of Xenia, Ohio. Printed accounts differ materially as to the date of this movement against the savages -the first offensive one of any importance from Kentucky. Some give the month of its occurrence as May; some assert that it was in July.

Now, there was one circumstance that many remembered, who, in their old age, recounted the particulars of the enterprise. It was that, during the night preceding the attack, an eclipse of the moon was clearly discernible. By referring to an almanac of the year 1779, we find there was an eclipse of the moon commencing in the longitude of Boston at about a quarter past ten o'clock on the evening of the twenty-ninth of May, and ending a few minutes after two o'clock on the morning of the thirtieth. So the date of the attack was the thirtieth of May, 1779.

Again: In the well-known letter written by George Rogers Clark to George Mason, from Louisville, on the nineteenth of November, 1779-printed by Robert Clarke & Co. of Cincinnati, in 'Clark's Campaign in the Illinois'the writer says that, having got everything in readiness on the twenty-sixth of June, 1778, he set off from the Falls of the Ohio on his famous expedition against the Illinois towns. Subsequently, Clark remembered that he started in the latter part of June, but had forgotten the day. "We left," he says, "our little island (opposite Louisville) and run about a mile up the river in order to gain the main channel, and shot the falls at the very moment of the sun being in a great eclipse, which caused various conjectures among the superstitious." But this eclipse, according to the almanacs of that year, was on the twenty-fourth of June; so the date as given by Clark in his Mason letter must be corrected by it. Eclipses, then, subserve in history, sometimes, very important offices.

THE number of buffaloes that frequented the western country at any early day was truly wonderful. As far north as the Red river region, herds were indeed numberless. John MacDonell, in writing to his brother, W. J. MacDonell, from Montreal, on the sixteenth of November, 1815, gives his relative an account that seems marvelous, but it is doubtless true. "To give you an idea of the numbers of buffaloes which occasionally frequent those parts,"

says the writer, "I shall relate that in May, 1795, I got on board of my canoe at sunrise, left the forks of the River Qui 'Appelle and put up for the night at sunset the same day, at a place called the Grand Bois, after having, from the canoe, counted seven thousand three hundred and sixty carcasses of buffaloes dead—that is, drowned and mired in the river and on its banks."

IT has often been asserted, and with truth, that there is a God in history. When we study its pages, therefore, we study the Creator. For this reason the truths of history, next to those of Holy Writ, are above all others the most to be regarded. In what way can the future be forecast, except by studying the past? And where shall we study the past except in history? Certainly, then, he who attempts to write history should, above all things, search for the truth, and when found should record it, not as of little importance, however small the subject. It is as incumbent on him who would give the history of a single individual to give it truthfully and impartially as on him who would write the history of a state, for what is a state but an aggregation of individuals? In all things historical, then, the truth is the one great aim.

But in truth there is always a sublimity, for God is truth. "Plain, honest truths need no artificial covering "-never need to be decked out in glowing colors-do not need the tricks of art to enforce their power. They are an enforcing power in themselves. So sensible are we of this, that we look with disfavor upon all rhetorical flourishes in historical composition, when there is the slightest suspicion that the author would present himself as well as the truth which he is unfolding. This, however, by no means implies that an elevated style is to be condemned. On the contrary, it is all-important. A nobility of diction, if it may be so termed, is one of the striking characteristics of the writings of Motley and Prescott, of Irving and Bancroft, of Parkman and McMaster.

THIS year (1886) is the semi-centennial year for Wisconsin; that is, "from and after the third day of July next" it will be fifty years since the act of congress took effect establishing the territory—now the state—of Wisconsin. The population of its four counties of Brown, Crawford, Iowa and Milwaukee—all there were then east of the Missisppi—was only 11,887. The state has now a population of 1,563,423, according to the census of last year. The coming "Fourth" in that state will doubtless be celebrated with unusual interest by its citizens.

On the seventeenth day of June, 1577, Sir Francis Drake anchored in a bay on the west coast of what is now the state of California, which, it is reasonably certain, was the bay of San Francisco. In their wanderings among the hills where the city of San Francisco is now situated, Drake's companions saw many strange and unaccountable sights. "We beheld," says one of those present, "a strange kinde of Conies, their bodyes in bignes as the Barbary Conies, their heades as the heades of ours, the feet of a Maut and the taile of a Rat, being of great length; under her chinne, on either side, a bagge, into the which shee gathereth her meat when she hath filled her belly abroad. The people eat their bodyes and make great account of their skinnes, for their King's coat was made of them." But more interesting than this is what the same writer says of the mineral wealth of the country: "There is no part," he declares, "of earth here to bee taken up wherein there is not some special likelyhood of gold and silver." The name given to the country by Sir Francis was New Albion, which, upon English maps, it retained for many years. "Our Generall," says the writer already quoted from, in giving a reason for its being so named, "called this countrey Noua Albion, and that for two causes: the one in respect of the white bankes and cliffes which lay towards the sea, and the other because it might have some affinitee with our country in name, which sometime was so-called."

THE remains of ancient times-ancient institutions and customs-these the historian cannot study profoundly. He leaves them to archæologists, only gathering from the vast storehouse salient points, general views, and the like. "Antiquities," says Lord Bacon, "are history defaced, or remnants that have escaped the shipwreck of time, . . wrecks of history, wherein the memory of things is almost lost, or such particulars as industrious persons, with exact and scrupulous diligence, can anyway collect from genealogies, calendars, titles, inscriptions, monuments, coins, names, etymologies, proverbs, traditions, archives, instruments, fragments of private and public history, scattered passages of books, no way historical, etc., by which means something is recovered from the deluge of time. . . In this imperfect history no deficiency need be noted, it being of its own nature imperfect."

In Paris, France, on the ninth of December last, died, suddenly, Mrs. Newberry, widow of the late Walter L. Newberry. Her death released for a public library in Chicago the munificent sum of two and one-half million dollars. It is understood that the library will not be an institution like the public library already in that city—one where all tastes must be considered—but more of a private institution, resembling the Astor in New York. "The selections," says The Library Journal, "will be made with reference to the wants of students and connoisseurs in literature, history, science, art and the various professions."

A LETTER written by M. de la Barre, on the fourth of November, 1683, at Quebec, to M. de Seignelay, refers, among other things, to a map of the west then being made in the Canadian city in which he was writing. This map was to be the work of one Franquelin. "He is at work," says De la Barre, "on a very correct map of the country, which I shall send you next year in his name." Jean Baptisté Louis Franquelin was a young engineer, who held the post of hydrographer to the king, at Quebec. His successor was Louis Joliet.

He finished the map spoken of by De la Barre. It bears date 1684, and has his name signed to it. It is entitled, "Carte de la Louisiane ou des voyages du Sr. de la Salle, et des pays qu'il a découverts depuis la Nouvelle France jusqu'au Golfe Mexique, les années 1679, 80, 81 et 82." "This map," says Parkman, "is the most remarkable of all the early maps of the interior of North America." Franquelin reproduced it in 1688, correcting some errors in his great work of 1684. The revised map, however, contains two very important mistakes, which the historical student-especially the student of western history-will do well to observe. Fort St. Nicholas is located on the east side of the Mississippi river, when it should have been on the west side, and just above the mouth of the Wisconsin, when it should have been some distance below it. Again: Fort St. Antoine (St. Anthony) is marked on the east side of the Mississippi, just below Lake Pepin, when it should have been put down as at the head of Green bay.

THE interest manifested in the life history of Samuel de Champlain, caused by the publication of Parkman's 'Pioneers of France in the New World,' was considerably increased by Rev. Edmund F. Slafter giving to the public, in 1880, his 'Memoir' of that daring Frenchman, as prefatory to 'Champlain's Voyages,' which he has very ably translated. The leading events in Champlain's western career are well summarized in Butterfield's account of John Nicolet's exploration of the northwest, in 1634 and the year following. Another valuable contribution in the same line is the paper read by Henry H. Hurlbut, before the Chicago Historical society, on the twentieth of October last, of which an account has already been given in this Magazine. This paper has just been issued in pamphlet form from the press of the Fergus Printing company, and is very interesting.

THOMAS HUTCHINS was born in Monmouth county, New Jersey, about the year 1730. Before he was sixteen years of age he went west. He entered the British service as ensign before

he was of age, and was promoted to a lieutenancy on the eighteenth of December, 1757. In June, 1758, he was made quartermaster in Colonel Mercer's battalion, and, before 1763, was promoted to a captaincy and assistant engineer. In Boquet's expedition the next year, against the Ohio Indians, he served in the latter capacity, and, it is probable, wrote the material points of the narrative which has been published of that campaign. He was afterwards distinguished in an expedition against the Indians in Florida. At the commencement of the Revolution he was in London. Soon after, being suspected of holding a correspondence with Franklin, then in France, he was thrown into prison and his property, which was considerable, confiscated. After a few weeks confinement he was liberated. He then went to France, thence to America, where he was, on the fourth day of May, 1781, made geographer to the southern army, which office, on the eleventh of July following, was styled "Geographer to the United States of America," but another person held a like office, at the same date, to the main army. His 'Topographical Description of Virginia, Pennsylvania, Maryland and Carolina, with Maps,' was published in London, in 1778; his 'Historical and Topographical Description of Louisiana and West Florida,' in Philadelphia, in 1784. Under a congressional ordinance of 1785, for ascertaining the mode of disposing of lands in the western territory, the geographer of the United States (Hutchins was then alone) was directed to commence the survey of the government lands on the north side of the Ohio, under the general plan which has ever since been followed in congressional surveys. While engaged in this, the first survey of government lands, he was taken sick and died at Pittsburgh, on the twenty-eighth of April, 1789. Among those who have been spoken of as the originators of the invaluable system of surveys which was employed by him, his name stands prominent.

On the fifteenth of April, 1782, at Fort Pitt, in Pittsburgh, Pennsylvania, a number of officers, of the garrison, then under command of

Brigadier-general William Irvine, petitioned the latter, asking the privilege of secretly meeting together, as a most ancient society, the first and third Monday evenings in every month, excepting on cases of emergency. This petition was granted, and these Masons met accordingly, but for how long time is not known, probably about one year, as the garrison, the next year. was disbanded. The names of the petitioners were J. H. Lee, sergeant-major of the Pennsylvania detachment: Thomas Wood, sergeantmajor of the Seventh Virginia regiment; Simon Fletcher, quartermaster's sergeant of the Pennsylvania detachment; William Semple, sergeant; John Harris, corporal; Matthew Fout, sergeant; Michael Hanley, sergeant; John Hutchinson, corporal; Martin Sheridan, corporal; John Kean, corporal; J. Williams, sergeant of the Seventh Virginia regiment. Had members of the Masonic fraternity any earlier meetings in the west than those of the officers of the Fort Pitt garrison? Who will answer this question?

It is a popular error that there was once a French fort erected on the island of Mackinaw. The first fort ever built there was by the British, and was commenced in the year 1780, during the war of the Revolution. "The British," writes Captain D. H. Kelton, "undoubtedly constructed, at the foot of the bluff, some places of shelter in the form of 'dug-outs.' They had wood and water right at their door, and were protected from some of the hard winds of winter. The old Council house, or Government house, as I think it was called at times, may have been put up for the officers' use while al were under the bluff. After the block houses were finished they were used as barracks by the men; there was a fireplace on each of their floors. The material for the fort was almost, you might say, within reach of where it was to be used. The wood-work was all of the roughest kind-hewn timber and planks. The old fort occupied a portion of the ground of the present fort-perhaps two-thirds of it. The old block houses are still pointed out."

ONE of the most important events in the west during the Revolution was the capture, by Colonel George Rogers Clark, of Fort Sackville, at Vincennes, in what is now the state of Indiana, on the twenty-fourth of February, 1779, and the taking prisoner, at the same time, of Henry Hamilton, lieutenant-governor of Detroit, then in command of that post, together with the whole garrison under him. The terms agreed upon, finally, between Clark and Hamilton, have frequently been published; but, at the commencement of the negotiations for capitulation, Governor Hamilton produced certain articles with his name signed to them, which were refused. These articles are not, we believe, to be found in any work of western history. As they are important in an historical sense, they should be given to the public. They were printed in some of the eastern papers during the year 1779, a copy having been furnished by Colonel Clark for publication.

SHELBY county, Ohio, is somewhat unfortunate in having some of the points within her limits, which are of particular historical importance, incorrectly spelled. The Frenchman who, at an early day, was located at the southern end of the portage leading from the waters of the Miami to those of the Maumee, was Peter Lorimer, not Loramie. Hence, "Loramie township" and "Loramie creek" are incorrect. During the Revolution, "Lorimer's house," or "store," as it was called, was defended for a while by a single field-piece; but this gun was removed before the war closed. The "house" was laid in ashes by a detachment sent from "Chillicothe," now Piqua, Miami county, Ohio, by George Rogers Clark, in November, 1782. He speaks of it as "the British trading post at the carrying-place."

ONE of the most interesting as well as important military trials during the Revolution

was that of Major-general Arthur St. Clair, in August, 1778. He was charged:

First. With neglect of duty, under the fifth article of the eighteenth section of the 'Rules and Articles of War.'

Second. With cowardice, with treachery, with incapacity as a general, respectively, under the fifth article of the eighteenth section of the 'Rules and Articles of War.'

Third. With treachery, under the fifth article of the eighteenth section of the 'Rules and Articles of War.'

Fourth. With inattention to the progress of the enemy, with treachery, with incapacity as a general, respectively, under the fifth article of the eighteenth section of the 'Rules and Articles of War.'

Fifth. With shamefully abandoning the posts of Ticonderoga and Mount Independence, in his charge, under the twelfth article of the thirteenth section of the 'Rules and Articles of War.'

Major-general St. Clair plead not guilty. The court, "having duly considered the charges" against him and the evidence, were "unanimously of opinion" that he was "not guilty of either of the charges against him;" and they unanimously acquitted him "of all and every of them with the highest honor." (See 'Proceedings of a General Court Martial, held at White Plains, in the State of New York, by Order of His Excellency General Washington, Commander-in-Chief of the Army of the United States of America, for the Trial of Major-General St. Clair, August 25, 1778, Major-General Lincoln, President. Philadelphia: Printed by Hall & Sellers, in Market Street. Mdcclxxviii.' Reprinted in 'New York Historical Society's Collections, 1880.')

CORRESPONDENCE.

To the Editor of the MAGAZINE OF WESTERN HIS-TORY:

Youngstown, Ohio, Dec. 16, 1885. Dear Sir ,- I mail you a copy of a letter from Major Amos Stoddard, the first governor of Louisiana, which possesses historical value and, I think, will interest the readers of the Magazine. The original was furnished me by Colonel Lemuel T. Foster, of this place, a nephew of Major Stoddard, and to whom it has descended from his grandmother, Mrs. Benham, who for a second husband married Mr. Benham, and since its reception by her has been a treasured possession in the family. Major Stoddard was born in Woodbury, Connecticut, October 26, 1762; was a Revolutionary soldier from 1770 to the close of the war; was afterward in civil office; was appointed captain in the United States army in 1798, was first governor of Louisiana; was wounded in the siege of Fort Meigs and died of his wounds May II, 1813. Yours truly,

JOHN M. EDWARDS.

ST. Louis (Upper Louisiana), June 16, 1804.

My Dear Mother:—I have duly received your letter
of the fifteenth of April last, and am happy to hear
that you and yours enjoy good health. From what
you said in one of your former letters, I was led to
expect the death of Aunt Woodward and I heartily
participate in the sorrow of her family and friends.
To whom has Curtis got married? Of this you have
neelected to inform me.

neglected to inform me.
You seem to be anxious for my safety and the more so as you think me to be "among a people of strange speech." About two-thirds of the people in this country are from the States—many of them from New England—particularly from Connecticut; the other third are French. I now speak of those who dwell in Louisiana." Very few French are now intermixed with those on the east side of the Mississippi. I, however, find the French people very friendly. I even speak part of their language and they consider it a duty as well as a pleasure to make themselves agreeable to the United States.

In consequence of some previous arrangement at the seat of government, I took possession of Upper Louisiana in the name of the French Republic on the ninth day of March and on the next day I assumed the country and government in the name of the United States. The Spanish laws are still in force and will continue in force till the first day of October next. In the meantime I have the honor to act as governor of the province and my time is wholly oc-

cupied in the administration of justice. The number of souls in my jurisdiction is about twelve thousand. The country is beautiful beyond description. The lands contain marrow and fatness and produce all the conveniences and even many of the luxuries of life. Several large and rich compact villages are found on the banks of the Mississippi, and other rivers; some of these are pretty ancient, for you must know that this country was settled by the French as early as 1679. The compact part of St. Louis con-tains upwards of two hundred houses, mostly very large and built of stone; it is elevated and healthy, and the people are rich and hospitable. They live in a style equal to those larger seaport towns, and I find no want of education among them. In fine, you may rest assured that my situation is pleasant and that I enjoy good health. The only circumstance I have to regret is the great expense I am at in living-for all kinds of West India and other foreign produce is extremely dear. As I am entrusted with the temporary office of governor, I have been obliged to rent a large house in town. This, however, is at the expense of the government, but the daily expenses of my table are considerable.

On my arrival here the Spanish governor made a public dinner for me, particularly as I was the agent and commissioner to receive the country. This was soon followed by a public dinner and ball made me by the inhabitants of the town. These acts of civility I was obliged to return, and my station required it. Accordingly I also gave a public dinner and ball at my own house, and the expense amounted to \$622.75. I am in hopes, however, that the government will remunerate me for this expense, as also for the daily extra expense of my table. Even if I be denied a compensation for these particular expenses I shall not regret them, for the pleasure I have given and received is adequate to them.

When I shall be in the States again is quite uncertain. A military man never knows what to depend on. He must always be ready to move when duty calls, and to consider his time and talents as the property of the public. I mean, however, to shape my course eastward in the fall, if possible. At that time a party of Indian chiefs from the interior of Upper Louisiana will set out on a visit to the President. They must be conducted by an officer, and if I can obtain leave of absence I will conduct them myself to the seat of government.

them myself to the seat of government.

Remember me to my brothers and sisters, as well as to my other relations, particularly to Mr. Smith and wife, and you may rest assured that I do not forget my aged mother.

Amos Stoddard,
Captain and First Civil Commandant, U. Louisana.
Mrs. Benham.

To the Editor of THE MAGAZINE OF WESTERN HISTORY:

JANUARY MEETING OF THE OHIO ARCHÆOLOGICAL
AND HISTORICAL SOCIETY.

The regular monthly meeting of this society was held in the hall of representatives, state house, Columbus, Ohio, Wednesday evening, January 13. The lecture of the evening was given by Prof J. P. McLean of Hamilton, author of several works on archæology. He used a stereopticon lately purchased by him in London, England. The instrument was manipulated by Prof. E. H. Mark of the Ohio state university, while Prof. McLean stood near the screen explaining the views as they were projected on the wall. The lecture was very interesting and gave evidence of extensive research and a thorough acquaintance with the subject handled.

State School Commissioner Hon. E. D. Brown presided, and the presentation and acceptance of secretary A. A. Graham's monthly report headed the programme. The report shows that since the last meeting ten persons have joined the society, namely, Rev. A. G. Byers, Messrs. Will C. Turner, Daniel MacAuley, Moses M. Neil and George Riddle; and Mrs. William Dennison of Columbus; Rev. George W. Willard, Tiffin; Rev. L. M. Kerschner, Sulphur Springs; Hon. George H. Ely, and Hon. George W. Gardner of Cleveland. Donations, embracing books, papers, etc., were received during December from four persons and societies pertaining to history and archæology. Among them was a specimen aboriginal totem sign, a curious piece of work, from Mrs. Harriet E. Ide. It was taken from the grave of an Alaska chief by direction of Lieutenant Commodore George E. Ide. Lieutenant Ide, who was present, by request, spoke to the meeting about the curiosity, saying it had been found 120 miles from Sitka, Alaska, in a graveyard containing 125 or 150 graves, fashioned somewhat after the style of a dog house, and represented a family token, or history of clans or tribes, which had those birds and animals for their tribal symbols. Huge totem poles, elaborately carved, were commonplace sentinels before residences in that coun-

The committee which met with the agricultural convention to consider the matter of a centennial exposition in 1888, reported, and on motion of Mr. S. S. Rickly it was voted to leave the appointment of three society commissioners, who are to act jointly with a similar delegation from the agricultural board, to the executive committee.

Professor MacLean was then introduced as a man who, although young, had accomplished much in the study of archæology. He made a few remarks preliminary to the lecture proper, with reference to the origin of Americans. Theories to the contrary, he said, there is not a single straw to show from whence the American came. Books on the subject contended that some races were exotic. He named over a number of aboriginal tribes, and said they sprang from a common family, but he would not attempt to give the origin. Ohio presents the most specimens from which to study archæology, there being within her boundaries about 1,500 mounds. The time was when the state was mountainous, but a leveling had been effected by a change in climate and from other causes. He then proceeded to consider the geology of the country, and gave later a description of the more important mounds in the state. Among others he mentioned Fort Ancient, located in Warren, county, which he said has a wall five miles long, 35 feet in width at the base and 17 gateways, land on the interior being poor; Fortified Hill, Butler county, contains 16% acres, and is protected by an artificial swamp; a mound in Highland county has an altitude of 75 feet and a circumference of 22 feet; a stone structure at Bernville, Ross county, encloses 140 acres of ground, has a wall 8 feet broad and 6 high. A peculiarity here was an interior trench. He then took up city structures, the others being military. Sacred mounds, without one known exception, were composed of clay, and are peculiar to southern Ohio. Some students of pre-historic races believed Cincinnati was originally twice her present size.

The stereopticon was then brought into requisition and about fifty views of elevations wrought by the Mound Builders and implements of war, agriculture, etc., used by them exhibited on canvass, Professor McLean pointing out the prime objects which limited time would permit an explanation of. The views were brought out clear and held the attention of the audience for at least an hour.

At the close of the entertainment an opportunity was afforded those desiring to become members of the association to do so.

The next meeting, the annual meeting, occurs February 18 and 19, for which the following programme has been arranged: Address of the president; memorial of Henry B. Curtis, by A. R. Mc-Intire; papers will be read by F. C. Sessions, on "Art in Ohio;" W. H. Venable, "Early Travel in the West;" Professor G. F. Wright, "Archæology and

the Glacial Period in Ohio;" Miss Fannie B. Ward "Mexican Antiquities;" Dr. F. O. Hart, "Modern Customs of Savage Origin;" other interesting papers are also promised giving assurance that the first annual meeting of this society will be exceedingly instructive and entertaining.

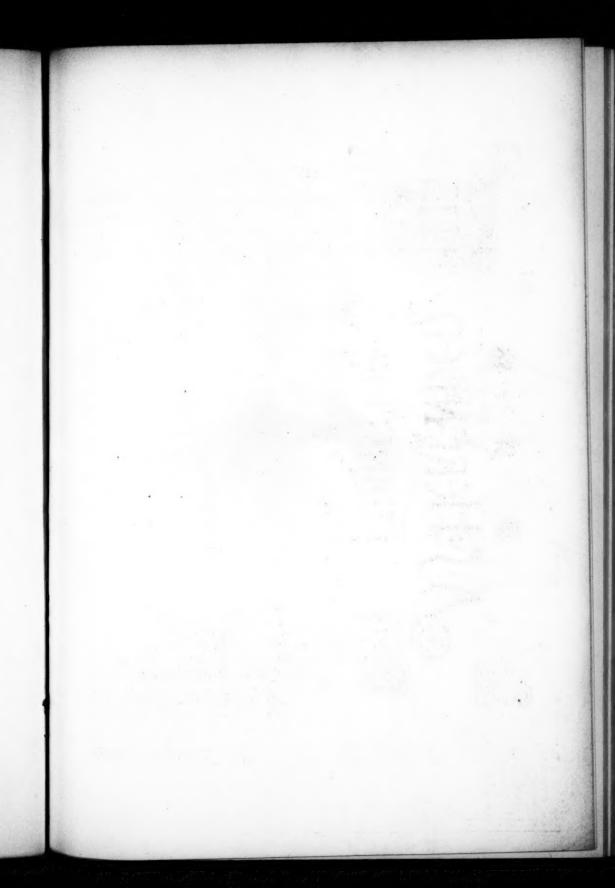
To the Editor of THE MAGAZINE OF WESTERN HISTORY:

ANNUAL MEETING OF THE STATE HISTORICAL SO-CIETY OF WISCONSIN.

The thirty-second annual meeting of the State Historical society of Wisconsin was held in the reading rooms of the society, on the evening of the seventh of January, 1886. There was a large attendance and much interest manifested. In the absence of the president, Dr. John A. Rice of Waukesha county, the vice-president present, Simeon Mills, occupied the chair. The Corresponding Secretary Dr. Lyman C. Draper, presented his annual report. He said that the work of the society during the year had been principally of a routine character, but little of special interest having occurred. The sixth volume of the library catalogue had been issued; and the tenth volume of the collections-completing the first series-was passing through the press. This volume will contain a large number of papers on early Wisconsin history. Many valuable books, together with other literary matter,

have been added to the library; and a most interesting collection of Indian ornaments, dress and implements of our Wisconsin tribes, made mostly by the late Governor James Duane Doty, have been secured and placed in the cabinet. The picture gallery has received a number of fine oil and crayon portraits during the year. The library additions for the year have been 2,130 volumes and 1,968 pamphlets, making a total increase of 4,008.

The secretary's report closed with a review of the flourishing condition of the society. "Such a library," said he, "needs friends, needs constant nurture and encouragement, to keep pace with the increasing demands for light and knowledge on almost every conceivable subject of human investigation. Our binding fund is the immediate matter in hand, appealing to our sympathies and generosity for its early completion. Then the society and its friends should turn their attention to providing for a noble general fund-not made up, perhaps, from little gifts and dribblets, but from generous donations and liberal requests." The officers of the society are: John A. Rice, president; Lyman C. Draper, corresponding secretary; Elisha Burdick, recording secretary; Daniel S. Durrie, librarian; and A. H. Main, treasurer. There are a large number of vicepresidents, two assistant librarians and one assistant corresponding secretary.





Magazine of Western History

The Mellon